

=> b reg

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STRUCTURE FILE UPDATES: 30 AUG 2004 HIGHEST RN 736108-36-4  
 DICTIONARY FILE UPDATES: 30 AUG 2004 HIGHEST RN 736108-36-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

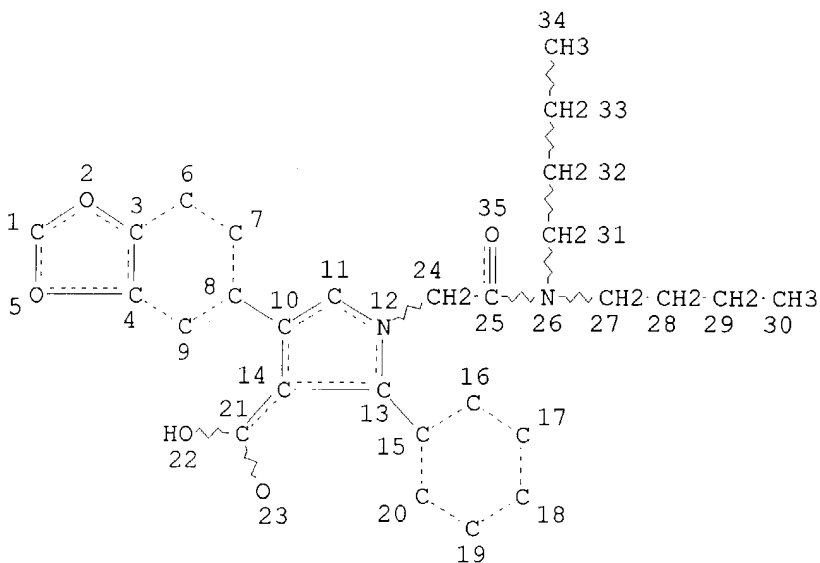
Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
 to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d que 18

L6 STR



#### NODE ATTRIBUTES:

CONNECT IS E2	RC AT	1
CONNECT IS E2	RC AT	6
CONNECT IS E2	RC AT	7
CONNECT IS E2	RC AT	9
CONNECT IS E2	RC AT	16
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CONNECT IS E2	RC AT	19
CONNECT IS E2	RC AT	20

Searched by P. Ruppel

CONNECT IS E1 RC AT 23  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RSPEC 12 15 8  
NUMBER OF NODES IS 35

## STEREO ATTRIBUTES: NONE

L8 1 SEA FILE=REGISTRY SSS FUL L6

=> d ide

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 178608-57-6 REGISTRY

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ )-

FS STEREOSEARCH

MF C28 H36 N2 O5

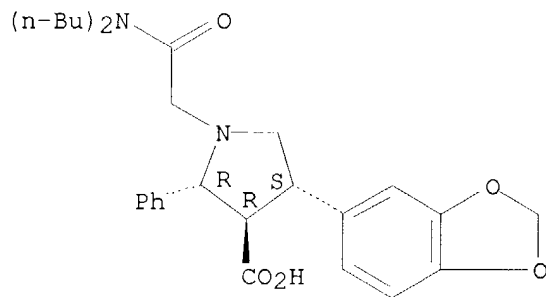
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> b home

FILE 'HOME' ENTERED AT 09:02:01 ON 01 SEP 2004

=>

Searched by P. Ruppel

=> b hcaplus  
FILE 'HCAPLUS' ENTERED AT 11:06:16 ON 01 SEP 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10  
FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d que 19 nos  
L6 STR  
L8 1 SEA FILE=REGISTRY SSS FUL L6  
L9 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L8

=> d ibib abs hitstr 19 1-6

L9 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:171682 HCAPLUS  
DOCUMENT NUMBER: 136:232311  
TITLE: Preparation of 4-benzoheterocyclyl-1-aminocarbonylmethylpyrrolidine-3-carboxylic acid derivatives as endothelin antagonists  
INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Hwan-Soo, Jae; Tasker, Andrew S.; Von Geldern, Tomas W.; Kester, Jeffrey; Sorensen, Bryan K.; Szczepankiewicz, Bruce G.; Henry, Kenneth; Liu, Gang; Wittenberger, Steven J.; King, Steven A.; Janus, Todd J.; Padley, Robert J.  
PATENT ASSIGNEE(S): Abbott Laboratories, USA  
SOURCE: PCT Int. Appl., 817 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002017912	A1	20020307	WO 2001-US27220	20010831
W: CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

Searched by P. Ruppel

-PT, SE, TR

PRIORITY APPLN. INFO.:

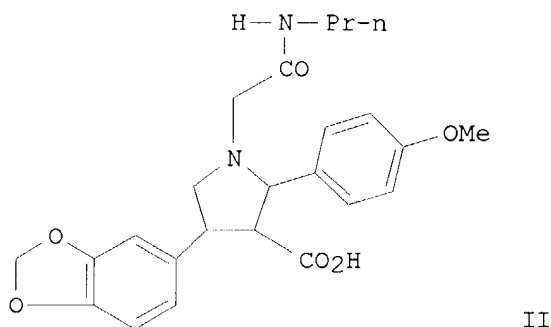
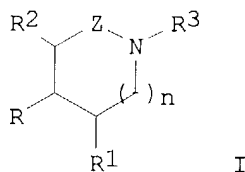
US 2000-653563

A 20000831

OTHER SOURCE(S):

MARPAT 136:232311

GI



AB Title compds. [I; n = 0; Z = CH<sub>2</sub>; R = CO<sub>2</sub>H; R<sub>1</sub> = alkoxyaryl, alkoxyalkoxyaryl, heterocyclylalkyl; R<sub>2</sub> = 1,3-benzodioxyl, 4-benzofuranyl, 5-indanyl; R<sub>3</sub> = R<sub>4</sub>R<sub>5</sub>CO; R<sub>4</sub> = R<sub>6</sub>R<sub>7</sub>N, R<sub>8</sub>R<sub>9</sub>NNH; R<sub>5</sub> = methylene; one of R<sub>6</sub>, R<sub>7</sub> is H, the other is arylalkyl, diarylalkyl; one of R<sub>8</sub>, R<sub>9</sub> is alkyl, the other is aryl] stereoisomers, and pharmaceutically acceptable salts are prepared as endothelin antagonists. Thus, the title compound II was prepared from Et (4-methoxybenzoyl)acetate, 5-(2-nitrovinyl)-1,3-benzodioxol, ethyldiisopropylamine, and N-Pr bromoacetamide and was in vitro tested for binding effect to the endothelin receptor and the determination of title compound as functional ET antagonist.

IT **178608-57-6P**

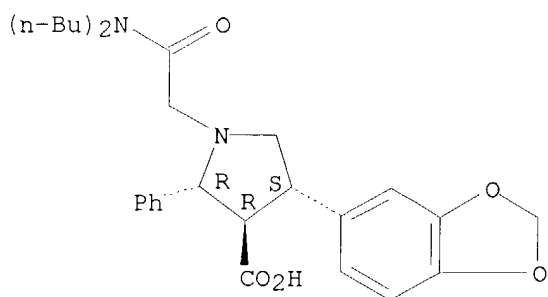
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-benzoheterocyclyl-1-aminocarbonylmethylpyrrolidine-3-carboxylic acid derivs. as endothelin antagonists)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:891585 HCAPLUS

DOCUMENT NUMBER: 134:42122

TITLE: Preparation of substituted pyrrolidine-3-carboxylic acids as endothelin antagonists

INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Jae, Hwan-soo; Tasker, Andrew S.; Von Geldern, Thomas W.; Kester, Jeffrey A.; Sorensen, Bryan K.; Szczepankiewicz, Bruce G.; Henry, Kenneth J.; Liu, Gang; Wittenberger, Steven J.; King, Steven A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: U.S., 587 pp., Cont.-in-part of U.S. Ser. No. 794,506. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

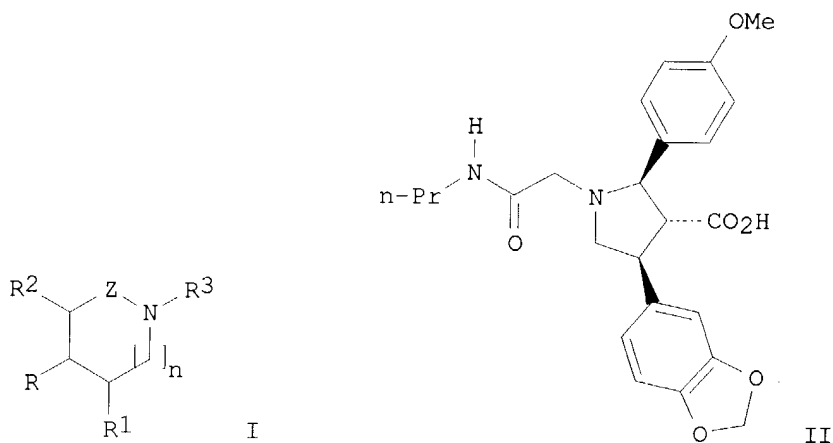
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6162927	A	20001219	US 1997-905913	19970804
US 5767144	A	19980616	US 1995-442575	19950530
ZA 9701179	A	19980115	ZA 1997-1179	19970212
NZ 514171	A	20031031	NZ 1997-514171	19970212
WO 9906397	A2	19990211	WO 1998-US15479	19980727
WO 9906397	A3	19991209		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9885921	A1	19990222	AU 1998-85921	19980727
AU 748469	B2	20020606		
EP 1003740	A2	20000531	EP 1998-937139	19980727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
TR 200000993	T2	20001221	TR 2000-200000993	19980727
JP 2001512119	T2	20010821	JP 2000-505155	19980727
BR 9815296	A	20011120	BR 1998-15296	19980727

TR 200101233	T2	20020621	TR 2001-200101233	19980727
TR 200101234	T2	20020621	TR 2001-200101234	19980727
NZ 502395	A	20020828	NZ 1998-502395	19980727
ZA 9806908	A	19990426	ZA 1998-6908	19980731
TW 552260	B	20030911	TW 1998-87112783	19980810
NO 2000000542	A	20000404	NO 2000-542	20000202
MX 200001283	A	20001030	MX 2000-1283	20000204
BG 104216	A	20001229	BG 2000-104216	20000302
US 6462194	B1	20021008	US 2000-572493	20000515
US 6380241	B1	20020430	US 2000-714934	20001117
PRIORITY APPLN. INFO.:			US 1994-293349	B2 19940819
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			US 1997-794506	A2 19970204
			NZ 1997-503365	A1 19970212
			US 1997-905913	A 19970804
			US 1998-48955	A 19980327
			WO 1998-US15479	W 19980727

OTHER SOURCE(S):

MARPAT 134:42122

GI



AB The title compds. {I; Z = CR<sup>18</sup>R<sup>19</sup>, CO (wherein R<sup>18</sup>, R<sup>19</sup> = H, alkyl); n = 0-1; R = (CH<sub>2</sub>)<sub>m</sub>W [m = 0-6; W = CO<sub>2</sub>G (G = H, a carboxy protecting group), PO<sub>3</sub>H<sub>2</sub>, CN, etc.]; R<sup>1</sup>, R<sup>2</sup> = H, alkyl, alkenyl, etc.; R<sup>3</sup> = -R<sup>5</sup>COR<sup>4</sup>, -NR<sup>6</sup>R<sup>5</sup>COR<sup>4</sup>, -R<sup>7</sup>SO<sub>2</sub>R<sup>6</sup>, etc. [R<sup>5</sup> = a bond, alkylene, alkenylene, etc.; R<sup>4</sup>, R<sup>6</sup> = NR<sup>11</sup>R<sup>12</sup> (R<sup>11</sup>, R<sup>12</sup> = H, alkyl, haloalkyl, etc.), alkyl, alkenyl, etc.; R<sup>7</sup> = a bond, alkylene, alkenylene, etc.]}, useful for antagonizing endothelin, were prepared and formulated. E.g., a multi-step synthesis of trans,trans-II which showed 96.4% endothelin A inhibition at 1 μM, was given.

IT 178608-57-6P

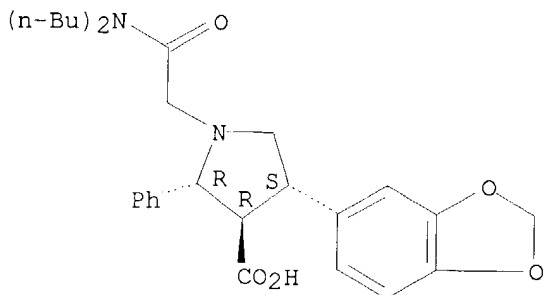
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted pyrrolidine-3-carboxylic acids as endothelin antagonists)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:113673 HCAPLUS

DOCUMENT NUMBER: 130:182352

TITLE: Preparation of substituted pyrrolidine-3-carboxylic acids as endothelin antagonists

INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Jae, Hwan-Soo; Tasker, Andrew S.; Von Geldern, Thomas W.; Kester, Jeffrey A.; Sorensen, Bryan K.; Szczepankiewicz, Bruce G.; Henry, Kenneth J.; Liu, Gang; Wittenberger, Steven J.; King, Steven A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 821 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

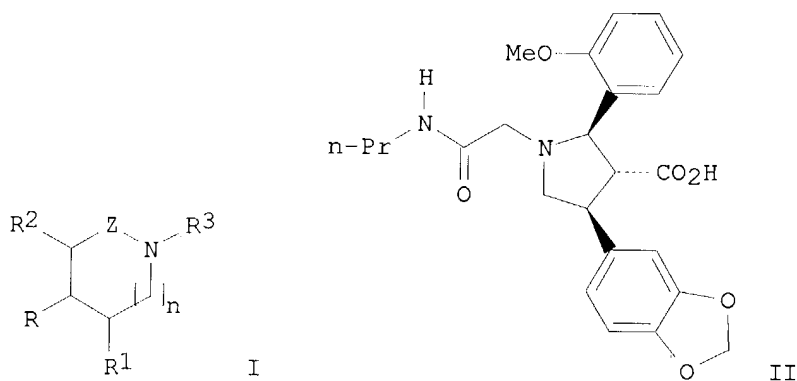
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906397	A2	19990211	WO 1998-US15479	19980727
WO 9906397	A3	19991209		
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RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6162927	A	20001219	US 1997-905913	19970804
AU 9885921	A1	19990222	AU 1998-85921	19980727
AU 748469	B2	20020606		
EP 1003740	A2	20000531	EP 1998-937139	19980727
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,			

SI, FI, RO

JP 2001512119	T2	20010821	JP 2000-505155	19980727
BR 9815296	A	20011120	BR 1998-15296	19980727
NZ 502395	A	20020828	NZ 1998-502395	19980727
NO 2000000542	A	20000404	NO 2000-542	20000202
MX 200001283	A	20001030	MX 2000-1283	20000204
BG 104216	A	20001229	BG 2000-104216	20000302
PRIORITY APPLN. INFO.:			US 1997-905913	A 19970804
			US 1998-48955	A 19980327
			US 1994-293349	B2 19940819
			US 1994-334717	B2 19941104
			US 1995-442575	A2 19950530
			US 1995-497998	B2 19950802
			US 1996-600625	B2 19960213
			US 1997-794506	A2 19970204
			WO 1998-US15479	W 19980727

OTHER SOURCE(S): MARPAT 130:182352

GI



AB The title compds. [I; Z = CR<sup>18</sup>R<sup>19</sup>, C(O) (wherein R<sup>18</sup>, R<sup>19</sup> = H, lower alkyl); n = 0-1; R = CN, OH, alkoxy, etc.; R<sup>1</sup>, R<sup>2</sup> = H, lower alkyl, alkenyl, etc.; R<sup>3</sup> = R<sup>4</sup>C(O)R<sup>5</sup>-, R<sup>4</sup>R<sup>5a</sup>-, R<sup>4</sup>C(O)R<sup>5</sup>NR<sup>6</sup>- (wherein R<sup>5</sup> = a bond, alkylene, alkenylene, etc.; R<sup>5a</sup> = alkylene, alkenylene; R<sup>4</sup>, R<sup>6</sup> = H, lower alkyl, haloalkyl, etc.), etc.], useful in treatment of conditions such as hypertension, congestive heart failure, atherosclerosis, etc., were prepared and formulated. E.g., a 4-step synthesis of the title compound trans,trans-II which showed 96.4% inhibition of ETA at 1  $\mu$ M, was given.

IT **178608-57-6P**

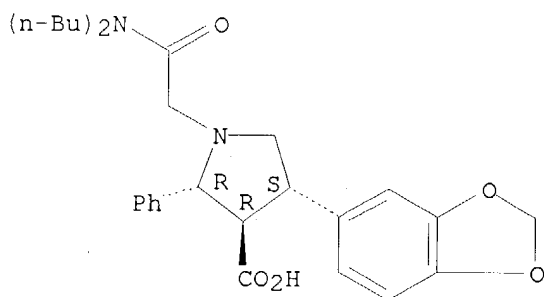
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of substituted pyrrolidine-3-carboxylic acids as endothelin antagonists)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.





L9 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:414738 HCAPLUS

DOCUMENT NUMBER: 129:95396

TITLE: Preparation of 1-(carbamoylmethyl)pyrrolidine-3-carboxylates and analogs as endothelin antagonists

INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Jae, Hwan-Soo; Tasker, Andrew S.; Von Geldern, Thomas W.; Kester, Jeffrey A.; Sorensen, Bryan K.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: U.S., 109 pp., Cont.-in-part of U.S. Ser. No. 334,717, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5767144	A	19980616	US 1995-442575	19950530
US 5622971	A	19970422	US 1995-457935	19950601
US 5731434	A	19980324	US 1995-458094	19950601
CA 2195677	AA	19960229	CA 1995-2195677	19950804
WO 9606095	A1	19960229	WO 1995-US9924	19950804
W: AU, CA, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9532137	A1	19960314	AU 1995-32137	19950804
AU 711832	B2	19991021		
EP 776324	A1	19970604	EP 1995-928323	19950804
EP 776324	B1	20020612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 10504565	T2	19980506	JP 1995-508101	19950804
EP 1186603	A2	20020313	EP 2001-125462	19950804
EP 1186603	A3	20030709		
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AT 219077	E	20020615	AT 1995-928323	19950804
PT 776324	T	20021129	PT 1995-928323	19950804
ES 2179881	T3	20030201	ES 1995-928323	19950804
IL 114894	A1	20030410	IL 1995-114894	19950810
NZ 514171	A	20031031	NZ 1997-514171	19970212
US 6162927	A	20001219	US 1997-905913	19970804
HK 1008328	A1	20030207	HK 1998-109192	19980715
AU 9920344	A1	19990603	AU 1999-20344	19990310
AU 725122	B2	20001005		

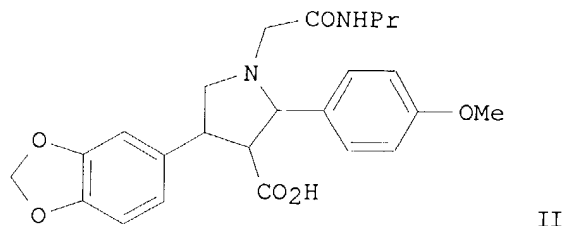
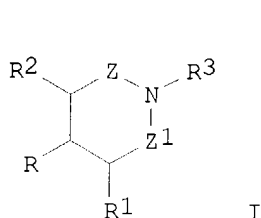
US 6462194  
US 6380241  
PRIORITY APPLN. INFO.:

B1 20021008  
B1 20020430

US 2000-572493 20000515  
US 2000-714934 20001117  
US 1994-293349 B2 19940819  
US 1994-334717 B2 19941104  
US 1995-442575 B3 19950530  
US 1995-497998 A 19950802  
AU 1995-32137 A3 19950804  
EP 1995-928323 A3 19950804  
WO 1995-US9924 W 19950804  
US 1996-600625 B2 19960213  
US 1997-794506 A2 19970204  
NZ 1997-503365 A1 19970212  
US 1997-905913 A3 19970804

OTHER SOURCE(S):  
GI

MARPAT 129:95396



AB Title compds. [I; R = (CH<sub>2</sub>)<sub>m</sub>R<sub>4</sub>; R<sub>1</sub>, R<sub>2</sub> = H, (un)substituted alkyl, heterocyclyl, aryl, etc.; R<sub>3</sub> = acyl(alkyl), etc.; R<sub>4</sub> = OH, alkoxy, acyl, heterocyclyl, etc.; Z = CH<sub>2</sub>, CO, alkylidene; Z<sub>1</sub> = bond or CH<sub>2</sub>; m = 0-6] were prepared. Thus, 4-(MeO)C<sub>6</sub>H<sub>4</sub>COCH<sub>2</sub>CO<sub>2</sub>Et was alkylated by 5-(2-nitrovinyl)-1,3-benzodioxole and the product reductively cyclized to give, in 3 addnl. steps, title compound II. Data for biol. activity of I were given.

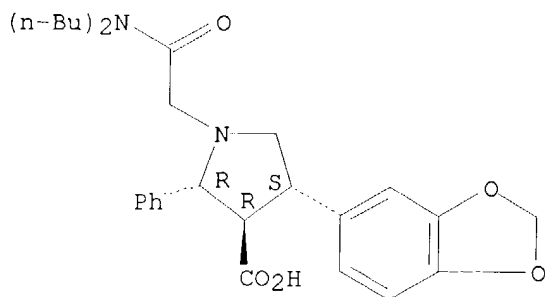
IT **178608-57-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 1-(carbamoylmethyl)pyrrolidine-3-carboxylates and analogs as endothelin antagonists)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



Searched by P. Ruppel

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:568105 HCAPLUS

DOCUMENT NUMBER: 127:248099

TITLE: Preparation of benzo-1,3-dioxolyl- and benzofuranyl-substituted pyrrolidine derivatives as endothelin antagonists.

INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Jae, Hwan-soo; Tasker, Andrew S.; Von Geldern, Thomas W.; Kester, Jeffrey A.; Sorensen, Bryan K.; Szczepankiewicz, Bruce G.; Henry, Kenneth J., Jr.; Liu, Gang; Wittenberger, Steven J.; King, Steven A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 682 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

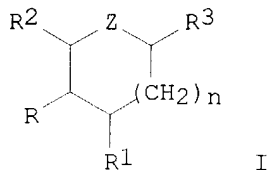
FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9730045	A1	19970821	WO 1997-US1936	19970212
W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NZ				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2245587	AA	19970821	CA 1997-2245587	19970212
AU 9722620	A1	19970902	AU 1997-22620	19970212
ZA 9701179	A	19980115	ZA 1997-1179	19970212
EP 885215	A1	19981223	EP 1997-905816	19970212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1219172	A	19990609	CN 1997-192184	19970212
CN 1091768	B	20021002		
BR 9707509	A	19990727	BR 1997-7509	19970212
NZ 330818	A	20000526	NZ 1997-330818	19970212
JP 2002504081	T2	20020205	JP 1997-529397	19970212
CN 1384100	A	20021211	CN 2002-104623	20020209
PRIORITY APPLN. INFO.:			US 1996-600625	A 19960213
			US 1997-794506	A 19970204
			WO 1997-US1936	W 19970212

OTHER SOURCE(S): MARPAT 127:248099

GI



AB Title compds. [I; Z = CR18R19, CO; R18, R19 = H, alkyl; n = 0, 1; R =

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(CH<sub>2</sub>)<sub>m</sub>W; m = 0-6; W = (protected) CO<sub>2</sub>H, PO<sub>3</sub>H<sub>2</sub>, cyano, alkylaminocarbonyl, tetrazolyl, OH, alkoxy, sulfonamido, specified heterocyclyl, etc.; R<sub>1</sub> = alkyl, alkenyl, haloalkyl, haloalkoxyalkyl, cycloalkylalkyl, alkylsulfonylamidoalkyl, heterocyclylalkyl, etc.; R<sub>2</sub> = H, alkyl, alkenyl, alkynyl, alkoxyalkyl, cycloalkyl, alkoxycarbonylalkyl, hydroxyalkyl, aminocarbonylalkenyl, hydroxyalkenyl, aryloxyalkyl, etc.; R<sub>3</sub> = R<sub>4</sub>COR<sub>5</sub>, R<sub>6</sub>SO<sub>2</sub>R<sub>7</sub>, etc.; R<sub>5</sub>, R<sub>7</sub> = bond, alkylene, alkenylene, iminoalkylene, etc.; R<sub>4</sub>, R<sub>6</sub> = amino, haloalkyl, cycloalkyl, alkoxyalkyl, arylalkyl, haloalkenyl, haloalkynyl, etc.], were prepared Thus, trans,trans-2-(4-methoxyphenyl)-4-(1,3-benzodioxol-5-yl)-1-(N-cyclopropylmethyl-N-propylaminocarbonylmethyl)pyrrolidine-3-carboxylic acid (preparation given) inhibited [125I]ET-1 binding to receptors by 100% at 1 mM.

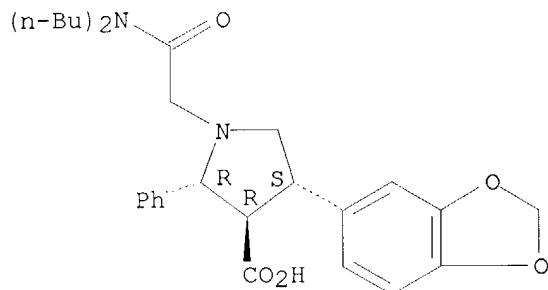
IT **178608-57-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzo-1,3-dioxolyl- and benzofuranyl-substituted pyrrolidine derivs. as endothelin antagonists)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L9 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:428406 HCAPLUS

DOCUMENT NUMBER: 125:86623

TITLE: Preparation of pyrrolidinecarboxylic acid derivatives and analogs as endothelin antagonists

INVENTOR(S): Winn, Martin; Boyd, Steven A.; Hutchins, Charles W.; Jae, Hwan-Soo; Tasker, Andrew S.; Vongeldern, Thomas W.; Kester, Jeffrey A.; Sorensen, Bryan K.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 277 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

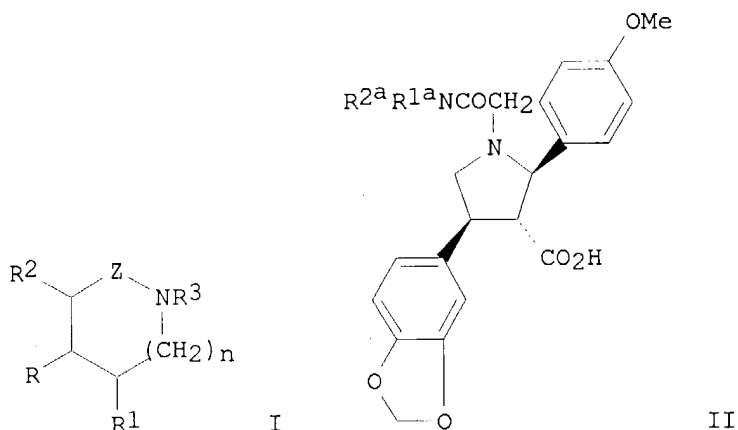
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9606095	A1	19960229	WO 1995-US9924	19950804
W: AU, CA, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

Searched by P. Ruppel

US 5767144	A	19980616	US 1995-442575	19950530
AU 9532137	A1	19960314	AU 1995-32137	19950804
AU 711832	B2	19991021		
EP 776324	A1	19970604	EP 1995-928323	19950804
EP 776324	B1	20020612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 10504565	T2	19980506	JP 1995-508101	19950804
AT 219077	E	20020615	AT 1995-928323	19950804
NZ 514171	A	20031031	NZ 1997-514171	19970212
HK 1008328	A1	20030207	HK 1998-109192	19980715
PRIORITY APPLN. INFO.:			US 1994-293349	A 19940819
			US 1994-334717	A 19941104
			US 1995-442575	A 19950530
			US 1995-497998	A 19950802
			WO 1995-US9924	W 19950804
			NZ 1997-503365	A1 19970212

OTHER SOURCE(S): MARPAT 125:86623  
GI



AB The title compds. [I; Z = CR<sup>18</sup>R<sup>19</sup>, CO; wherein R<sup>18</sup>, R<sup>19</sup> = H, lower alkyl; n = 0, 1; R = (CH<sub>2</sub>)<sub>m</sub>W; wherein m = 0-6; W = (un)protected CO<sub>2</sub>H, P(O)(OH)<sub>2</sub>, P(O)(OH)E (wherein E = H, lower alkyl, arylalkyl), cyano, CONHR<sup>17</sup> (wherein R<sup>17</sup> = lower alkyl), alkylaminocarbonyl, dialkylaminocarbonyl, tetrazolyl, OH, alkoxy, sulfamido, CONHSO<sub>2</sub>R<sup>16</sup> (R<sup>16</sup> = lower alkyl, haloalkyl, Ph, dialkylamino), etc.; R<sup>1</sup>, R<sup>2</sup> = H, lower alkyl, alkenyl, alkynyl, alkoxyalkyl, alkoxyalkylalkyl, hydroxyalkyl, alkoxyalkoxyalkyl, thioalkoxyalkoxyalkyl, cycloalkyl, aminocarbonylalkyl, mono- or dialkylaminocarbonylalkyl, aminocarbonylalkenyl, mono- or dialkylaminocarbonylalkenyl, hydroxyalkenyl, aryl, arylalkoxyalkyl, heterocyclyl, etc.; provided that one of R<sup>1</sup> and R<sup>2</sup> is other than H; R<sup>3</sup> = R<sup>4</sup>COZ<sup>5</sup>, R<sup>6</sup>SOZ<sup>7</sup>, R<sup>26</sup>SOZ<sup>27</sup>, etc.; wherein Z<sup>5</sup> = bond, alkylene, alkenylene, N-(un)substituted NH-alkylene or alkylene-NH-alkylene; Z<sup>7</sup> = bond, alkylene, alkenylene, N-(un)substituted NH-alkylene; R<sup>4</sup>, R<sup>6</sup> = (un)substituted NH<sub>2</sub>, lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl, alkoxyalkyl; R<sup>26</sup> = lower alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl,

alkoxyalkyl, alkoxyhaloalkyl; 227 = alkylene, alkenylene] or pharmaceutically acceptable salts thereof are prepared These compds. are useful for the treatment of hypertension, congestive heart failure, restenosis following arterial injury, cerebral or myocardial ischemia, or atherosclerosis. Thus, addition reaction of Et (4-methoxybenzoyl)acetate with 5-(2-nitrovinyl)-1,3-benzodioxole in the presence of DBU in toluene at 80° for 75 min gave Et 2-(4-methoxybenzoyl)-4-nitromethyl-3-(1,3-benzodioxol-5-yl)butyrate which underwent hydrogenation in the presence of a Raney nickel 2800 catalyst in EtOH at 4 atm H pressure to give Et 2-(4-methoxyphenyl)-4-(1,3-benzodioxol-5-yl)-4,5-dihydro-3H-pyrrole-3-carboxylate. Reduction of the latter compound with NaBH<sub>3</sub>CN in the presence of bromocresol in THF under adding dropwise a mixture of concentrated HCl and EtOH gave a mixture of cis,cis-, trans,trans-, and cis,trans-Et 2-(4-methoxyphenyl)-4-(1,3-benzodioxol-5-yl)pyrrolidine-3-carboxylate which underwent alkylation with N-propylbromoacetamide in the presence of (Me<sub>2</sub>CH)<sub>2</sub>NEt in MeCN at 50° for 1 h followed by selective saponification with NaOH in aqueous EtOH and acidification with HCl to give the title compound (II; R<sub>1a</sub> = H, R<sub>2a</sub> = n-Pr). The latter compound and II (R<sub>1a</sub> = R<sub>2a</sub> = Bu) at 1 μM in vitro inhibited 96.4 and 99.2%, resp., binding of [<sup>125</sup>I]endothelin 1 to endothelin A receptor in a membrane preparation from MMQ cell line (prolactin secreting rat pituitary cells).

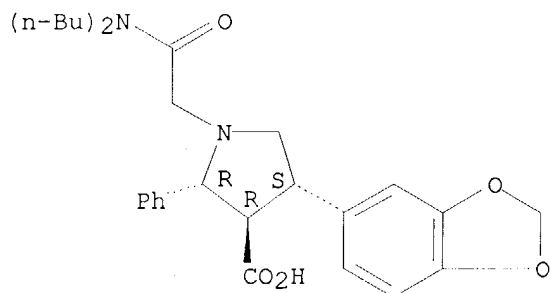
IT 178608-57-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of pyrrolidinecarboxylic acid derivs. and analogs as endothelin antagonists for disease therapy)

RN 178608-57-6 HCAPLUS

CN 3-Pyrrolidinecarboxylic acid, 4-(1,3-benzodioxol-5-yl)-1-[2-(dibutylamino)-2-oxoethyl]-2-phenyl-, (2R,3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> b home

FILE 'HOME' ENTERED AT 11:07:04 ON 01 SEP 2004

=>

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspat01plr

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'HOME' AT 11:19:41 ON 01 SEP 2004  
FILE 'HOME' ENTERED AT 11:19:41 ON 01 SEP 2004

=> => b medl

FILE 'MEDLINE' ENTERED AT 11:21:00 ON 01 SEP 2004

FILE LAST UPDATED: 31 AUG 2004 (20040831/UP). FILE COVERS 1951 TO DATE.

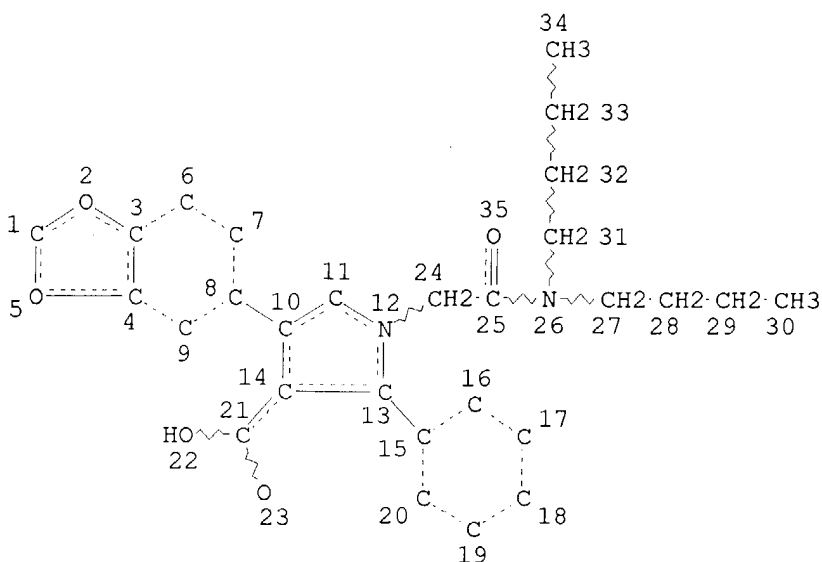
On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD for details. OLD MEDLINE now back to 1951.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See <http://www.nlm.nih.gov/mesh/> and [http://www.nlm.nih.gov/pubs/techbull/nd03/nd03\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html) for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que 111

L6 STR



NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1  
CONNECT IS E2 RC AT 6

Searched by P. Ruppel

CONNECT IS E2 RC AT 7  
CONNECT IS E2 RC AT 9  
CONNECT IS E2 RC AT 16  
CONNECT IS E2 RC AT 17  
CONNECT IS E2 RC AT 18  
CONNECT IS E2 RC AT 19  
CONNECT IS E2 RC AT 20  
CONNECT IS E1 RC AT 23  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RSPEC 12 15 8  
NUMBER OF NODES IS 35

## STEREO ATTRIBUTES: NONE

L8 1 SEA FILE=REGISTRY SSS FUL L6  
L11 0 SEA FILE=MEDLINE ABB=ON PLU=ON L8

=> b embase

FILE 'EMBASE' ENTERED AT 11:21:11 ON 01 SEP 2004  
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FILE COVERS 1974 TO 26 Aug 2004 (20040826/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d que l12 nos

L6 STR  
L8 1 SEA FILE=REGISTRY SSS FUL L6  
L12 0 SEA FILE=EMBASE ABB=ON PLU=ON L8

=> b biosis

FILE 'BIOSIS' ENTERED AT 11:21:20 ON 01 SEP 2004  
Copyright (c) 2004 The Thomson Corporation.

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 26 August 2004 (20040826/ED)

FILE RELOADED: 19 October 2003.

=> d que l13 nos

L6 STR  
L8 1 SEA FILE=REGISTRY SSS FUL L6  
L13 0 SEA FILE=BIOSIS ABB=ON PLU=ON L8

=> b cancerlit

FILE 'CANCERLIT' ENTERED AT 11:21:32 ON 01 SEP 2004



FILE COVERS 1963 TO 15 Nov 2002 (20021115/ED)

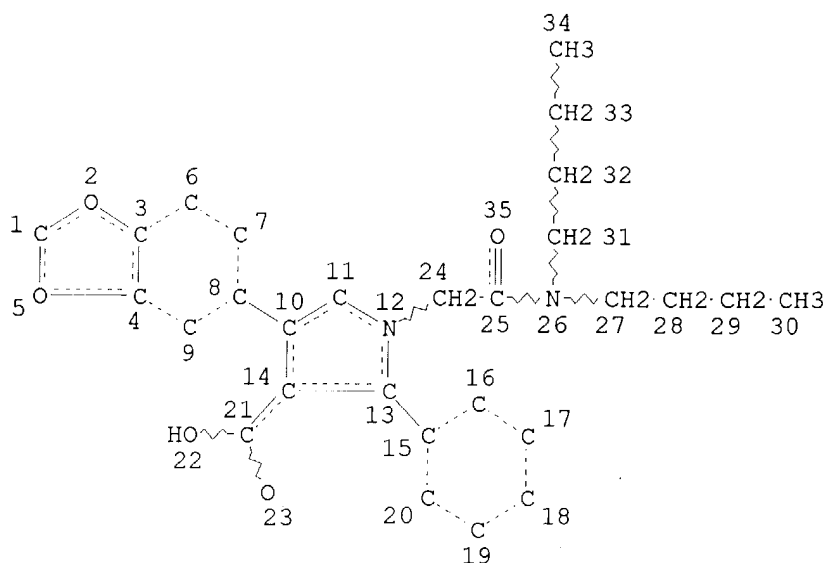
On July 28, 2002, CANCERLIT was reloaded. See HELP RLOAD for details.

CANCERLIT thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que l14

L6 STR



NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1  
 CONNECT IS E2 RC AT 6  
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 CONNECT IS E2 RC AT 18  
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 CONNECT IS E2 RC AT 20  
 CONNECT IS E1 RC AT 23  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 12 15 8  
 NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE

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=> b home

FILE 'HOME' ENTERED AT 11:21:38 ON 01 SEP 2004

=>

=> b medl

FILE 'MEDLINE' ENTERED AT 10:48:34 ON 01 SEP 2004

FILE LAST UPDATED: 31 AUG 2004 (20040831/UP). FILE COVERS 1951 TO DATE.

On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD for details. OLD MEDLINE now back to 1951.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See <http://www.nlm.nih.gov/mesh/> and [http://www.nlm.nih.gov/pubs/techbull/nd03/nd03\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html) for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que 1137

L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
L99	6745	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L98(L)DT
L107	424	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	BICALUTAMIDE
L112	241	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L107 AND L99
L137	131	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L112 AND PY<=2000

=> d que 1138

L65 (	1)	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	NILUTAMIDE/CN
L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
L99	6745	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L98(L)DT
L109	201	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	NILUTAMIDE OR L65
L114	116	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L109 AND L99
L138	99	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L114 AND PY<=2000

=> d que 1139

L67 (	1)	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	PREDNISONE/CN
L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
L99	6745	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L98(L)DT
L115	33098	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L67 OR PREDNISONE
L116	87	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L115 AND L99
L139	61	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L116 AND PY<=2000

=> d que 1140

L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
L99	6745	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L98(L)DT
L118	3687	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	HYDROCORTISONE/CT(L)TU
L119	24	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L99 AND L118
L140	22	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L119 AND PY<=2000

=> d que 1141

L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
L99	6745	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L98(L)DT
L120	1837	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	KETOCONAZOLE/CT(L)TU
L121	58	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L99 AND L120
L141	56	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L121 AND PY<=2000

=> d que 1142

L98	42603	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"PROSTATIC NEOPLASMS"/CT
-----	-------	-----	--------------	--------	--------	--------------------------

L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L123 57 SEA FILE=MEDLINE ABB=ON PLU=ON ("CYPROTERONE ACETATE"/CT (L) TU  
 ) AND L99  
 L142 45 SEA FILE=MEDLINE ABB=ON PLU=ON L123 AND PY<=2000

=> d que 1143

L98 42603 SEA FILE=MEDLINE ABB=ON PLU=ON "PROSTATIC NEOPLASMS"/CT  
 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L124 348 SEA FILE=MEDLINE ABB=ON PLU=ON (FLUTAMIDE/CT (L) TU) AND L99  
 L143 293 SEA FILE=MEDLINE ABB=ON PLU=ON L124 AND PY<=2000

=> d que 1144

L98 42603 SEA FILE=MEDLINE ABB=ON PLU=ON "PROSTATIC NEOPLASMS"/CT  
 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L125 25596 SEA FILE=MEDLINE ABB=ON PLU=ON "VITAMIN D"+NT/CT  
 L126 44 SEA FILE=MEDLINE ABB=ON PLU=ON (L125 (L) TU) AND L99  
 L144 17 SEA FILE=MEDLINE ABB=ON PLU=ON L126 AND PY<=2000

=> d que 1145

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 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L127 48031 SEA FILE=MEDLINE ABB=ON PLU=ON ESTROGENS+NT/CT  
 L128 1028 SEA FILE=MEDLINE ABB=ON PLU=ON (L127 (L) TU) AND L99  
 L145 985 SEA FILE=MEDLINE ABB=ON PLU=ON L128 AND PY<=2000

=> d que 1146

L98 42603 SEA FILE=MEDLINE ABB=ON PLU=ON "PROSTATIC NEOPLASMS"/CT  
 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L129 155 SEA FILE=MEDLINE ABB=ON PLU=ON (GOSERELIN/CT (L) TU) AND L99  
 L146 97 SEA FILE=MEDLINE ABB=ON PLU=ON L129 AND PY<=2000

=> d que 1147

L98 42603 SEA FILE=MEDLINE ABB=ON PLU=ON "PROSTATIC NEOPLASMS"/CT  
 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L131 11 SEA FILE=MEDLINE ABB=ON PLU=ON (PROGESTERONE/CT (L) TU) AND  
 L99  
 L147 11 SEA FILE=MEDLINE ABB=ON PLU=ON L131 AND PY<=2000

=> d que 1148

L98 42603 SEA FILE=MEDLINE ABB=ON PLU=ON "PROSTATIC NEOPLASMS"/CT  
 L99 6745 SEA FILE=MEDLINE ABB=ON PLU=ON L98 (L) DT  
 L130 163 SEA FILE=MEDLINE ABB=ON PLU=ON (LEUPROLIDE/CT (L) TU) AND L99  
 L148 107 SEA FILE=MEDLINE ABB=ON PLU=ON L130 AND PY<=2000

=> d all 1137 3 5 6

*bicalutamide*

L137 ANSWER 3 OF 131 MEDLINE on STN  
 AN 2001068333 MEDLINE  
 DN PubMed ID: 11025427  
 TI Antagonist/agonist balance of the nonsteroidal antiandrogen  
**bicalutamide** (Casodex) in a new prostate cancer model.  
 AU Hobisch A; Hoffmann J; Lambrinidis L; Eder I E; Bartsch G; Klocker H;  
 Culig Z

CS Department of Urology, University of Innsbruck, Austria..  
alfred.hobisch@uibk.ac.at

SO Urologia internationalis, (2000) 65 (2) 73-9.  
Journal code: 0417373. ISSN: 0042-1138.

CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200012

ED Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20001227

AB Androgen ablation is standard therapy for advanced prostate carcinoma. It can be administered either as a monotherapy or as a combined androgen blockade. In the present study we have investigated molecular mechanisms which are responsible for the development of resistance to therapy in advanced prostate cancer. For this purpose, we have cultured LNCaP cells in steroid-depleted medium for 1 year. The newly generated subline LNCaP-abl was characterized. In early passages (<75) LNCaP-abl cells showed a biphasic hypersensitive response to androgenic stimulation. Passages later than 75 are inhibited by androgen. Proliferation of LNCaP-abl cells was stimulated by the pure nonsteroidal antiandrogen **bicalutamide** (Casodex). To improve our understanding of changes which occur during intermittent androgen ablation, we have generated the sublines LNCaP-R (reversal; cultured with fetal calf serum) and LNCaP-RA (reversal and androgen; cultured with fetal calf serum and androgen) from LNCaP-abl cells. In both cell lines an increase of the basal proliferation rate was observed. Androgen receptor expression in LNCaP-abl cells was 4-fold higher than that in parental LNCaP cells (4.7 vs. 1.2 fmol/microg protein). Androgen receptor content in LNCaP-R cells was 1.8 fmol/microg protein and in LNCaP-RA cells 1.0 fmol/microg protein. The basal androgen receptor activity was 30-fold higher in LNCaP-abl cells compared to that in parental LNCaP cells. This basal activity was reduced in LNCaP-RA cells. Both androgen and the nonsteroidal androgen receptor antagonist hydroxyflutamide induced a 2- to 4-fold higher activation of androgen receptor in LNCaP-abl than in LNCaP cells. There was a switch from an antagonist to an agonist of the nonsteroidal antiandrogen **bicalutamide** (Casodex) in LNCaP-abl cells. Antagonistic properties of this androgen receptor blocker were again observed in both sublines (LNCaP-R and LNCaP-RA) derived from LNCaP-abl cells. In concordance with proliferation data in vitro, growth of LNCaP-abl cells in nude mice was stimulated by **bicalutamide**. In contrast, supplementation of androgen led to inhibition of proliferation of these cells. The present study provides new information that is useful for a better understanding of therapy-refractory prostate cancer. It is also important for the development of new therapy strategies for advanced carcinoma of the prostate.  
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CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
\*Androgen Antagonists: TU, therapeutic use  
\*Androgens: AG, agonists  
\*Anilides: TU, therapeutic use  
\*Prostatic Neoplasms: DT, drug therapy  
Tumor Cells, Cultured

RN 90357-06-5 (**bicalutamide**)

CN 0 (Androgen Antagonists); 0 (Androgens); 0 (Anilides)

L137 ANSWER 5 OF 131 MEDLINE on STN

AN 2001031593 MEDLINE

DN PubMed ID: 11025708

TI **Bicalutamide** monotherapy compared with castration in patients with nonmetastatic locally advanced prostate cancer: 6.3 years of followup.

AU Iversen P; Tyrrell C J; Kaisary A V; Anderson J B; Van Poppel H; Tammela T L; Chamberlain M; Carroll K; Melezinek I

CS Rigshospitalet, University of Copenhagen, Copenhagen, Denmark.

SO Journal of urology, (2000 Nov) 164 (5) 1579-82.  
Journal code: 0376374. ISSN: 0022-5347.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200011

ED Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20001121

AB PURPOSE: Nonsteroidal antiandrogen monotherapy may be a treatment option for some patients with advanced prostate cancer. We report a survival and safety update from an analysis of 2 studies in which patients with nonmetastatic (M0) locally advanced disease were treated with either 150 mg. **bicalutamide** monotherapy or castration. MATERIALS AND METHODS: Data from 2 open label, multicenter studies of identical design were pooled according to protocol. Patients with stage T3/4 prostate cancer were randomized to receive 150 mg. **bicalutamide** daily or castration (orchiectomy or 3.6 mg. goserelin acetate every 28 days) in a 2:1 ratio. RESULTS: A total of 480 patients with locally advanced prostate cancer were randomized to treatment. After a median followup of 6.3 years mortality was 56%. There was no statistically significant difference between the 2 groups in overall survival (hazard ratio 1.05, upper 1-sided 95% confidence limit 1.31, p = 0.70) or time to progression (1.20, 1.45, p = 0.11). There were statistically significant benefits in the **bicalutamide** monotherapy group in the 2 quality of life parameters of sexual interest (p = 0.029) and physical capacity (p = 0.046). The highest incidences of adverse events were the pharmacological side effects of hot flashes in the castration group, and breast pain and gynecomastia in the **bicalutamide** group. The incidences of other types of adverse events were low. **Bicalutamide** was well tolerated, with few drug related withdrawals from study, and no new safety issues were identified during this longer followup. CONCLUSIONS: Monotherapy with 150 mg. **bicalutamide** is an attractive alternative to castration in patients with locally advanced prostate cancer for whom immediate hormone therapy is indicated.

CT Check Tags: Comparative Study; Human; Male; Support, Non-U.S. Gov't  
\*Androgen Antagonists: TU, therapeutic use  
\*Anilides: TU, therapeutic use  
\*Castration  
Disease Progression  
Follow-Up Studies  
Multicenter Studies  
\*Prostatic Neoplasms: DT, drug therapy  
Prostatic Neoplasms: MO, mortality  
\*Prostatic Neoplasms: SU, surgery  
Randomized Controlled Trials  
Survival Analysis

RN 90357-06-5 (**bicalutamide**)

CN 0 (Androgen Antagonists); 0 (Anilides)

L137 ANSWER 6 OF 131 MEDLINE on STN

AN 2001008175 MEDLINE

DN PubMed ID: 10853458

TI New indication sought for **bicalutamide**.  
 AU Anonymous  
 SO Oncology (Williston Park, N.Y.), (2000 May) 14 (5) 654, 772.  
 Journal code: 8712059. ISSN: 0890-9091.  
 CY United States  
 DT News Announcement  
 LA English  
 FS Priority Journals  
 EM 200010  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001025  
 CT Check Tags: Human; Male  
 Androgen Antagonists: AE, adverse effects  
 Androgen Antagonists: PD, pharmacology  
 \*Androgen Antagonists: TU, therapeutic use  
 Anilides: AE, adverse effects  
 Anilides: PD, pharmacology  
 \*Anilides: TU, therapeutic use  
 Antineoplastic Agents, Hormonal: AE, adverse effects  
 Antineoplastic Agents, Hormonal: PD, pharmacology  
 \*Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Antineoplastic Combined Chemotherapy Protocols: TU, therapeutic use  
 Castration  
 Chemotherapy, Adjuvant  
 Neoadjuvant Therapy  
 \*Prostatic Neoplasms: DT, drug therapy  
 Quality of Life  
 Randomized Controlled Trials  
 RN 90357-06-5 (bicalutamide)  
 CN 0 (Androgen Antagonists); 0 (Anilides); 0 (Antineoplastic Agents,  
 Hormonal); 0 (Antineoplastic Combined Chemotherapy Protocols)

=> d all l138 1 2 3

L138 ANSWER 1 OF 99 MEDLINE on STN  
 AN 2000512716 MEDLINE  
 DN PubMed ID: 11071217  
 TI Androgen blockade in prostate cancer.  
 CM Comment on: Lancet. 2000 Apr 29;355(9214):1491-8. PubMed ID: 10801170  
 AU Labrie F; Candas B  
 SO Lancet, (2000 Jul 22) 356 (9226) 341-2.  
 Journal code: 2985213R. ISSN: 0140-6736.  
 CY ENGLAND: United Kingdom  
 DT Commentary  
 Letter  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals  
 EM 200011  
 ED Entered STN: 20010322  
 Last Updated on STN: 20011004  
 Entered Medline: 20001128  
 CT Check Tags: Human; Male  
 \*Androgen Antagonists: TU, therapeutic use  
 Cyproterone Acetate: TU, therapeutic use  
 \*Flutamide: TU, therapeutic use  
 \*Imidazoles: TU, therapeutic use  
 Meta-Analysis  
 Orchiectomy

**\*Prostatic Neoplasms: DT, drug therapy**

RN 13311-84-7 (Flutamide); 427-51-0 (Cyproterone Acetate); **63612-50-0**  
(nilutamide)

CN 0 (Androgen Antagonists); 0 (Imidazoles)

L138 ANSWER 2 OF 99 MEDLINE on STN

AN 2000259108 MEDLINE

DN PubMed ID: 10801170

TI Maximum androgen blockade in advanced prostate cancer: an overview of the randomised trials. Prostate Cancer Trialists' Collaborative Group.

CM Comment in: ACP J Club. 2001 Jan-Feb;134(1):23

Comment in: Lancet. 2000 Apr 29;355(9214):1474-5. PubMed ID: 10801162

Comment in: Lancet. 2000 Jul 22;356(9226):341-2. PubMed ID: 11071217

AU Anonymous

SO Lancet, (2000 Apr 29) 355 (9214) 1491-8.

Journal code: 2985213R. ISSN: 0140-6736.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)  
(META-ANALYSIS)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200005

ED Entered STN: 20000606

Last Updated on STN: 20011004

Entered Medline: 20000522

AB BACKGROUND: In advanced prostate cancer, androgen suppression (AS) by surgery or drugs controls testicular hormone secretion, and the further addition of an antiandrogen such as **nilutamide**, flutamide, or cyproterone acetate is referred to as maximum androgen blockade (MAB). The aim of this overview was to compare the effects on the duration of survival of MAB and of AS alone. METHODS: The collaborative meta-analysis of 27 randomised trials involved central reanalysis of the data on each of 8275 men (98% of those ever randomised in trials of MAB vs AS) with metastatic (88%) or locally advanced (12%) prostate cancer. Half were over 70 years of age, and follow-up was typically for about 5 years. FINDINGS: 5932 (72%) men have died; of the deaths for which causes were provided, about 80% were attributed to prostate cancer. 5-year survival was 25.4% with MAB versus 23.6% with AS alone, a non-significant gain of 1.8% (SE 1.3; logrank 2p=0.11). There was no significant heterogeneity in the treatment effect (MAB vs AS) with respect to age or disease stage. The results for cyproterone acetate, which accounted for only a fifth of the evidence, appeared slightly unfavourable to MAB (5-year survival 15.4% MAB vs 18.1% AS alone; difference -2.8% [SE 2.4]; logrank 2p=0.04 adverse), whereas those for **nilutamide** and flutamide appeared slightly favourable (5-year survival 27.6% MAB vs 24.7% AS alone; difference 2.9% [SE 1.3]; logrank 2p=0.005). Non-prostate-cancer deaths (although not clearly significantly affected by treatment) accounted for some of the apparently adverse effects of cyproterone acetate. INTERPRETATION: In advanced prostate cancer, addition of an antiandrogen to AS improved the 5-year survival by about 2% or 3% (depending on whether the analysis includes or excludes the cyproterone acetate trials), but the range of uncertainty as to the true size of this benefit runs from about 0% to about 5%.

CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
Aged

\*Androgen Antagonists: TU, therapeutic use

\*Cyproterone: TU, therapeutic use

\*Flutamide: TU, therapeutic use

\*Imidazoles: TU, therapeutic use

Orchiectomy



**\*Prostatic Neoplasms: DT, drug therapy**

Prostatic Neoplasms: MO, mortality

Prostatic Neoplasms: SU, surgery

Randomized Controlled Trials

Survival Analysis

RN 13311-84-7 (Flutamide); 2098-66-0 (Cyproterone); **63612-50-0**  
(**nilutamide**)

CN 0 (Androgen Antagonists); 0 (Imidazoles)

L138 ANSWER 3 OF 99 MEDLINE on STN

AN 2000138748 MEDLINE

DN PubMed ID: 10673793

TI Antiandrogens: a summary review of pharmacodynamic properties and tolerability in prostate cancer therapy.

AU Migliari R; Muscas G; Murru M; Verdacchi T; De Benedetto G; De Angelis M

CS Operative Unit of Urology, ASL 8, Arezzo, Italy.. uromig@tin.it

SO Archivio italiano di urologia, andrologia : organo ufficiale [di] Societa italiana di ecografia urologica e nefrologica / Associazione ricerche in urologia, (1999 Dec) 71 (5) 293-302. Ref: 65  
Journal code: 9308247. ISSN: 1124-3562.

CY Italy

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LA English

FS Priority Journals

EM 200002

ED Entered STN: 20000314

Last Updated on STN: 20000314

Entered Medline: 20000229

AB This article provides a summary of the pharmacodynamic properties of major antiandrogens as well as an extensive review of their tolerability. Presently there are two classes of androgen receptor antagonists: the so-called pure, non-steroidal antiandrogens which include flutamide, **nilutamide** and the more recent bicalutamide and the steroidal antiandrogens cyproterone acetate, megestrol acetate and WIN 49596. Although non steroidal and steroidal compounds have been found to be equally effective in the treatment of prostate cancer presently no studies comparing the use of steroidal or non steroidal antiandrogens with chemical or surgical castration have evaluated quality of life per se. The only advantage of cyproterone acetate on pure antiandrogens seems to be the low incidence of hot flushes; a commonly reported adverse effect of androgen ablative therapy. However, hepatotoxicity associated with long term daily doses of 300 mg daily and the unacceptably high incidence of cardiovascular side effects (10%) should restrict its use to patients who are intolerant of pure antiandrogen compound. In contrast to steroidal compound nonsteroidal compounds let sexual potency to be retained, which is an important consideration with respect to the quality of life of some patients and, at present, the main indication for monotherapy with the pure antiandrogens. As regard as pure antiandrogens clinically important adverse events including gastrointestinal events, particularly diarrhea and occasional disturbances of liver function related to flutamide treatment and antabuse effect, problems with light-dark adaptation and rare interstitial pneumonitis related to **nilutamide** indicates the bicalutamide, due to its better tolerability profile, together with its once-daily oral administration regimen, could be considered the antiandrogen of first choice in the treatment of prostatic cancer.

CT Check Tags: Human; Male

\*Androgen Antagonists: PD, pharmacology

\*Androgen Antagonists: TU, therapeutic use

Anilides: PD, pharmacology  
 Anilides: TU, therapeutic use  
 Antineoplastic Agents, Hormonal: PD, pharmacology  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Flutamide: PD, pharmacology  
 Flutamide: TU, therapeutic use  
 Imidazoles: PD, pharmacology  
 Imidazoles: TU, therapeutic use

**\*Prostatic Neoplasms: DT, drug therapy**

Receptors, Androgen: AI, antagonists & inhibitors

RN 13311-84-7 (Flutamide); **63612-50-0 (nilutamide)**; 90357-06-5  
 (bicalutamide)

CN 0 (Androgen Antagonists); 0 (Anilides); 0 (Antineoplastic Agents,  
 Hormonal); 0 (Imidazoles); 0 (Receptors, Androgen)

=> d all l139 2 3 5

L139 ANSWER 2 OF 61 MEDLINE on STN

AN 2001192615 MEDLINE

DN PubMed ID: 11205458

TI Chemotherapy in advanced androgen-independent prostate cancer 1990-1999: a  
 decade of progress?.

AU Culine S; Droz J P

CS Department of Medicine, CRLC Val d'Aurelle, Montpellier, France..  
 stculine@valdorel.fnclcc.fr

SO Annals of oncology : official journal of the European Society for Medical  
 Oncology / ESMO, (2000 Dec) 11 (12) 1523-30. Ref: 74  
 Journal code: 9007735. ISSN: 0923-7534.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LA English

FS Priority Journals

EM 200104

ED Entered STN: 20010410

Last Updated on STN: 20010410

Entered Medline: 20010405

AB BACKGROUND AND PURPOSE: A great number of clinical research studies have  
 been reported in the field of chemotherapy for advanced  
 androgen-independent prostate cancer during the last ten years. The aims  
 of the present review were to assess their impact on management of the  
 disease and on survival of patients. METHODS: The review of full  
 published reports was facilitated by the use of a MEDLINE computer search.  
 RESULTS: Clinical research studies have focused on defining guidelines for  
 eligibility criteria and accurate endpoints for patients to be enrolled  
 onto clinical trials and developing new agents or combination of drugs  
 including estramustine phosphate. Any combination of current chemotherapy  
 has no impact on overall survival of patients. Among drugs in  
 development, only the promising activity observed with docetaxel deserves  
 randomized trials to assess its impact on survival. The major innovative  
 advance of the 90s is the demonstration of the impact of chemotherapy  
 (mitoxantrone + **prednisone**) on quality of life as compared to  
**prednisone** alone. A greater and longer-lasting improvement in  
 quality of life along with a concomitant decrease in costs was observed.  
 CONCLUSIONS: At the present time, chemotherapy should be considered as a  
 palliative treatment in patients with symptomatic androgen-independent  
 disease. The enrollment of patients into clinical trials dealing with  
 quality of life as primary endpoint is strongly solicited. A standard

methodology should be used in phase II trials with a primary goal of selection of agents which should progress to randomized trials using survival as an endpoint. Hopefully new specific strategies targeted to reverse the molecular changes that underlie prostate tumorigenesis should rapidly impact the multimodality management of AIPC in the third millenium.

CT Check Tags: Human; Male  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Antineoplastic Agents, Phytogenic: TU, therapeutic use  
 \*Antineoplastic Combined Chemotherapy Protocols: TU, therapeutic use  
 Mitoxantrone: TU, therapeutic use  
 Neoplasm Metastasis  
 \*Paclitaxel: AA, analogs & derivatives  
 Paclitaxel: TU, therapeutic use  
 Palliative Care  
 Prednisolone: TU, therapeutic use  
 \*Prostatic Neoplasms: DT, drug therapy  
 Prostatic Neoplasms: PA, pathology  
 \*Quality of Life  
 Randomized Controlled Trials  
 \*Taxoids

RN 114977-28-5 (docetaxel); 33069-62-4 (Paclitaxel); 50-24-8 (Prednisolone); 65271-80-9 (Mitoxantrone)

CN 0 (Antineoplastic Agents, Hormonal); 0 (Antineoplastic Agents, Phytogenic); 0 (Antineoplastic Combined Chemotherapy Protocols); 0 (Taxoids)

L139 ANSWER 3 OF 61 MEDLINE on STN

AN 2000217012 MEDLINE

DN PubMed ID: 10751862

TI Prostate specific antigen response to mitoxantrone and **prednisone** in patients with refractory prostate cancer: prognostic factors and generalizability of a multicenter trial to clinical practice.

AU Dowling A J; Czaykowski P M; Krahn M D; Moore M J; Tannock I F

CS Department of Medical Oncology and Hematology, Princess Margaret Hospital, University of Toronto, Toronto, British Columbia.

SO Journal of urology, (2000 May) 163 (5) 1481-5.  
 Journal code: 0376374. ISSN: 0022-5347.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200005

ED Entered STN: 20000512  
 Last Updated on STN: 20000512  
 Entered Medline: 20000502

AB PURPOSE: We determine prostate specific antigen (PSA) response and durability, and prognostic factors associated with response and survival in patients with symptomatic hormone refractory prostate cancer treated with mitoxantrone and **prednisone** at a single institution. We then compare the results with those of a randomized phase III clinical trial. MATERIALS AND METHODS: A retrospective review of all 133 patients treated with mitoxantrone and **prednisone** at Princess Margaret Hospital since 1994 was performed. PSA response and duration, and overall survival were determined as well as the influence of baseline factors on these outcome parameters. Results were compared to those for patients randomized to receive mitoxantrone and **prednisone** in the Canadian clinical trial which demonstrated palliative benefit of this regimen. RESULTS: Patients treated after trial closure had shorter survival (p = 0.003) but represented a poorer prognosis cohort. PSA

response of the trial and post-trial cases was 34% and 28%, respectively ( $p = 0.36$ ), and median duration of response was 118 and 175 days or greater, respectively. Factors predictive of PSA response in the non-trial cohort were longer time from diagnosis of prostate cancer ( $p = 0.027$ ) and higher baseline PSA ( $p = 0.013$ ). Factors predictive of increased survival in both groups were younger age ( $p < 0.04$ ), better baseline Eastern Cooperative Oncology Group performance status ( $p < 0.02$ ), and higher hemoglobin ( $p \leq 0.05$ ) and PSA response ( $p < 0.0001$ ). Gleason score was not predictive of response or survival. CONCLUSIONS: Although patients treated outside of the trial had poorer prognostic features, rates of PSA response to mitoxantrone and **prednisone** were comparable. Factors predictive of survival were similar in the 2 cohorts. Results of the randomized trial are generalizable to clinical practice.

CT Check Tags: Comparative Study; Human; Male; Support, Non-U.S. Gov't

\*Adenocarcinoma: BL, blood

\*Adenocarcinoma: DT, drug therapy

Adenocarcinoma: MO, mortality

Aged

\*Antineoplastic Combined Chemotherapy Protocols: TU, therapeutic use

Clinical Trials, Phase III

Middle Aged

Mitoxantrone: AD, administration & dosage

Multicenter Studies

**Prednisone: AD, administration & dosage**

Prognosis

\*Prostate-Specific Antigen: BL, blood

\*Prostatic Neoplasms: BL, blood

**\*Prostatic Neoplasms: DT, drug therapy**

Prostatic Neoplasms: MO, mortality

Randomized Controlled Trials

Retrospective Studies

Survival Rate

RN 53-03-2 (**Prednisone**); 65271-80-9 (Mitoxantrone)

CN 0 (Antineoplastic Combined Chemotherapy Protocols); EC 3.4.21.77  
(Prostate-Specific Antigen)

L139 ANSWER 5 OF 61 MEDLINE on STN

AN 2000067760 MEDLINE

DN PubMed ID: 10604271

TI Docetaxel (Taxotere) and estramustine versus mitoxantrone and **prednisone** for hormone-refractory prostate cancer: scientific basis and design of Southwest Oncology Group Study 9916.

AU Hussain M; Petrylak D; Fisher E; Tangen C; Crawford D

CS Department of Internal Medicine, Wayne State University School of Medicine and Barbara Ann Karmanos Cancer Institute, Detroit, MI, USA.

SO Seminars in oncology, (1999 Oct) 26 (5 Suppl 17) 55-60.

Journal code: 0420432. ISSN: 0093-7754.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199912

ED Entered STN: 20000113

Last Updated on STN: 20000113

Entered Medline: 19991222

AB Hormone-refractory prostate cancer is the terminal step in the natural history of prostate cancer. To date, no chemotherapeutic agents have been shown to impact clinical outcome at this stage. Recently, the Food and Drug Administration approved the combination of mitoxantrone and **prednisone** based solely on its superior palliative effects as

compared to steroids alone in 2 randomized trials. Progress in biologically driven drug development has led to the identification of several estramustine-based regimens that, although based on single institution experience, appear to have at least a comparable but very promising level of activity in hormone-refractory prostate cancer patients. One such combination, estramustine plus docetaxel (Taxotere; Rhone-Poulenc Rorer, Collegeville, PA), is particularly attractive because of its convenient schedule and side effect profile. To objectively assess the therapeutic benefit of this combination, the Southwest Oncology Group is initiating a randomized phase III trial comparing estramustine and docetaxel with the standard arm of mitoxantrone and **prednisone** using time to progression and survival as the primary end points. Secondary end points will include toxicity profiles, assessments of quality of life parameters, and magnitude of decline of prostate-specific antigen levels between the two treatment arms.

CT Check Tags: Comparative Study; Human; Male  
 \*Adenocarcinoma: DT, drug therapy  
 Adenocarcinoma: SC, secondary  
 \*Antineoplastic Combined Chemotherapy Protocols: TU, therapeutic use  
 Clinical Trials, Phase III  
 Estramustine: AD, administration & dosage  
 Mitoxantrone: AD, administration & dosage  
 \*Neoplasms, Hormone-Dependent: DT, drug therapy  
 Neoplasms, Hormone-Dependent: PA, pathology  
 Paclitaxel: AD, administration & dosage  
 \*Paclitaxel: AA, analogs & derivatives  
**Prednisone: AD, administration & dosage**  
**\*Prostatic Neoplasms: DT, drug therapy**  
 Prostatic Neoplasms: PA, pathology  
 Randomized Controlled Trials  
 \*Taxoids  
 RN 114977-28-5 (docetaxel); 2998-57-4 (Estramustine); 33069-62-4  
 (Paclitaxel); **53-03-2 (Prednisone)**; 65271-80-9 (Mitoxantrone)  
 CN 0 (Antineoplastic Combined Chemotherapy Protocols); 0 (Taxoids)

=> d all 1140 1-3

L140 ANSWER 1 OF 22 MEDLINE on STN  
 AN 2001154998 MEDLINE  
 DN PubMed ID: 11204256  
 TI Suramin administration is associated with a decrease in serum calcium levels.  
 AU Walther M M; Rehak N N; Venzon D; Myers C E; Linehan W M; Figg W D  
 CS Urologic Oncology Branch, DCS/NCI/NIH, Bethesda, MD 20892-1501, USA..  
 macw@nih.gov  
 SO World journal of urology, (2000 Dec) 18 (6) 388-91.  
 Journal code: 8307716. ISSN: 0724-4983.  
 CY Germany: Germany, Federal Republic of  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200103  
 ED Entered STN: 20010404  
 Last Updated on STN: 20010404  
 Entered Medline: 20010322  
 AB Suramin has been shown to have an effect on bone resorption in in vitro models. It is not clear if a similar effect is seen in patients treated with suramin. The clinical effect of suramin treatment on total serum calcium was examined in two groups of patients with hormone-refractory

prostate cancer. In all, 28 patients in group 1 were examined within 2 weeks before and 2 weeks after suramin treatment and 72 patients in group 2 were examined within 2 weeks before, during, and after treatment with suramin. In addition, calcium controls spiked with suramin were run in three different commercially available assays for evaluation of the effect of suramin dose on calcium determination. Group 1 patients showed a decrease in serum calcium after treatment with suramin. The mean uncorrected serum calcium level was  $2.29 \pm 0.025$  mmol/l before treatment and  $2.09 \pm 0.025$  mmol/l after treatment ( $P < 0.0001$ , paired Wilcoxon test). The mean serum calcium value corrected for albumin was  $2.33 \pm 0.02$  mmol/l before treatment and  $2.24 \pm 0.02$  mmol/l after treatment ( $P = 0.0022$ , paired Wilcoxon test). Group 2 patients also displayed a decrease in serum calcium after treatment with suramin. The mean baseline value was 2.23 mmol/l (median 2.26 mmol/l, range 1.20-2.54 mmol/l). The mean level of serum calcium corrected for albumin as determined at the end of treatment was 2.14 mmol/l (median 2.16 mmol/l, range 0.98-2.46 mmol/l). In all, 48 patients for whom pre- and post-treatment values were available for analysis displayed a median calcium decrease of 0.09 mmol/l ( $P = 0.0005$ , Wilcoxon signed-rank test for the null hypothesis of no change). For 68 patients in group 2, data on serial serum calcium measurements during treatment were available for analysis. A projected median decrease in serum calcium of 0.06 mmol/l (range 0.43 to 0.72 mmol/l) over an 8-week interval of suramin therapy was found. Overall, 47 of the 68 slopes were negative ( $P = 0.0022$ , Wilcoxon signed-rank test). Nine patients were treated with suramin for less than 6 weeks. These patients' calcium levels were significantly higher than those of 50 patients treated for longer periods (median value 2.24 versus 2.16 mmol/l,  $P = 0.035$ , Wilcoxon rank-sum test). No correlation was found between suramin dose and calcium level using the Kodak Ektachem, Hitachi 914, or Synchron Clinical System CX3 method. In conclusion, suramin treatment was consistently associated with decreases in serum calcium in two groups of patients with hormone-refractory cancer. Suramin placed in calcium controls did not affect calcium determination using three commercially available methods.

CT Check Tags: Human; Male

Anti-Inflammatory Agents: TU, therapeutic use

Antineoplastic Agents: AD, administration & dosage

\*Antineoplastic Agents: TU, therapeutic use

Antineoplastic Agents, Hormonal: TU, therapeutic use

Antineoplastic Combined Chemotherapy Protocols

\*Calcium: BL, blood

Drug Administration Schedule

Drug Resistance

Hormones: TU, therapeutic use

**Hydrocortisone: TU, therapeutic use**

Leuprolide: TU, therapeutic use

Pilot Projects

\*Prostatic Neoplasms: BL, blood

**\*Prostatic Neoplasms: DT, drug therapy**

Retreatment

Retrospective Studies

Suramin: AD, administration & dosage

\*Suramin: TU, therapeutic use

RN 145-63-1 (Suramin); 50-23-7 (Hydrocortisone); 53714-56-0 (Leuprolide);  
7440-70-2 (Calcium)

CN 0 (Anti-Inflammatory Agents); 0 (Antineoplastic Agents); 0 (Antineoplastic Agents, Hormonal); 0 (Antineoplastic Combined Chemotherapy Protocols); 0 (Hormones)

L140 ANSWER 2 OF 22 MEDLINE on STN

AN 2000385998 MEDLINE

Searched by P. Ruppel

DN PubMed ID: 10848697  
TI Stilboestrol plus adrenal suppression as salvage treatment for patients failing treatment with luteinizing hormone-releasing hormone analogues and orchidectomy.  
AU Farrugia D; Ansell W; Singh M; Philp T; Chinegwundoh F; Oliver R T  
CS Urological Oncology, The Royal Hospitals Trust, and Whipps Cross Hospital, London, UK.  
SO BJU international, (2000 Jun) 85 (9) 1069-73.  
Journal code: 100886721. ISSN: 1464-4096.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200008  
ED Entered STN: 20000818  
Last Updated on STN: 20000818  
Entered Medline: 20000810  
AB OBJECTIVE: To investigate the efficacy of low-dose stilboestrol (SB) with hydrocortisone in patients with advanced prostate cancer refractory to androgen suppression. PATIENTS AND METHODS: Thirty-four consecutive patients (median age 70 years, range 51-83) with metastatic disease who progressed on hormone therapy, as shown by recurrent/worsening symptoms and an increase in prostate-specific antigen (PSA) level, were recruited and discontinued hormonal treatment before starting SB. Patients received SB (1 mg/day) combined with hydrocortisone (40 mg/day). In an attempt to reduce the incidence of thrombo-embolic events, aspirin (75 mg/day) was also added. RESULTS: Stilboestrol was the second-line treatment in 19 patients and the third or fourth in 15. The median (range) duration of treatment with SB was 5 (0.5-21) months and the median follow-up 7.5 months, with 18 patients still alive and 14 still on treatment. Of 29 symptomatic patients, 24 had symptomatic improvement and five had no clear benefit; the median duration of benefit was 6 (2-21) months. The PSA level decreased by 0-50% in six patients, by 50-90% in 13 and by > 90% in eight, while there was symptomatic improvement in these three categories in five, 11 and seven patients, respectively. The median times to PSA nadir and progression were 4 and 6 months, respectively. Some thrombo-embolic events and fluid retention occurred but overall the treatment was well tolerated. CONCLUSION: Low-dose SB with hydrocortisone is effective in refractory prostate cancer, although there is some toxicity. Randomized studies against hydrocortisone or SB alone are needed to establish the cost/benefit ratio of this combination.  
CT Check Tags: Human; Male  
Aged  
Aged, 80 and over  
\*Antineoplastic Agents, Hormonal: TU, therapeutic use  
Aspirin: TU, therapeutic use  
\*Diethylstilbestrol: TU, therapeutic use  
Drug Therapy, Combination  
Gonadorelin: AA, analogs & derivatives  
Gonadorelin: AI, antagonists & inhibitors  
\*Hydrocortisone: TU, therapeutic use  
Middle Aged  
\*Orchiectomy: MT, methods  
\*Prostatic Neoplasms: DT, drug therapy  
Salvage Therapy: MT, methods  
Treatment Failure  
RN 33515-09-2 (Gonadorelin); 50-23-7 (Hydrocortisone); 50-78-2 (Aspirin); 56-53-1 (Diethylstilbestrol)  
CN 0 (Antineoplastic Agents, Hormonal)

L140 ANSWER 3 OF 22 MEDLINE on STN  
AN 2000200496 MEDLINE  
DN PubMed ID: 10735891  
TI Suramin therapy for patients with symptomatic hormone-refractory prostate cancer: results of a randomized phase III trial comparing suramin plus hydrocortisone to placebo plus hydrocortisone.  
AU Small E J; Meyer M; Marshall M E; Reyno L M; Meyers F J; Natale R B; Lenehan P F; Chen L; Slichenmyer W J; Eisenberger M  
CS University of California at San Francisco Comprehensive Cancer Center, San Francisco 94115, USA.. smalle@medicine.ucsf.edu  
SO Journal of clinical oncology : official journal of the American Society of Clinical Oncology, (2000 Apr) 18 (7) 1440-50.  
Journal code: 8309333. ISSN: 0732-183X.  
CY United States  
DT (CLINICAL TRIAL)  
(CLINICAL TRIAL, PHASE III)  
Journal; Article; (JOURNAL ARTICLE)  
(RANDOMIZED CONTROLLED TRIAL)  
LA English  
FS Priority Journals  
EM 200004  
ED Entered STN: 20000505  
Last Updated on STN: 20000505  
Entered Medline: 20000421  
AB PURPOSE: Suramin is a novel agent that has demonstrated preliminary evidence of antitumor activity in hormone-refractory prostate cancer (HRPC). A prospective randomized clinical trial was designed to evaluate pain and opioid analgesic intake as surrogates for antitumor response in HRPC patients with significant, opioid analgesic-dependent pain. PATIENTS AND METHODS: A double-blind, placebo-controlled trial randomized patients to receive a 78-day, outpatient regimen of either suramin plus hydrocortisone (HC, 40 mg/d) or placebo plus HC. Treatment assignment was unblinded when either disease progression or dose-limiting toxicity occurred; placebo patients were allowed to cross-over to open-label suramin plus HC. In addition to pain and opioid analgesic intake, prostate-specific antigen (PSA) response, time to disease progression, quality of life, performance status, and survival were compared. RESULTS: Overall mean reductions in combined pain and opioid analgesic intake were greater for suramin plus HC (rank sum  $P = .0001$ ). Pain response was achieved in a higher proportion of patients receiving suramin than placebo (43% v 28%;  $P = .001$ ), and duration of response was longer for suramin responders (median, 240 v 69 days;  $P = .0027$ ). Time to disease progression was longer (relative risk = 1.5; 95% confidence interval, 1.2 to 1.9) and the proportion of patients with a greater than 50% decline in PSA was higher (33% v 16%;  $P = .01$ ) in patients who received suramin. Neither quality of life nor performance status was decreased by suramin treatment, and overall survival was similar. Most adverse events were of mild or moderate intensity and were easily managed medically. CONCLUSION: Outpatient treatment with suramin plus HC is well tolerated and provides moderate palliative benefit and delay in disease progression for patients with symptomatic HRPC.  
CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
Adult  
Aged  
Aged, 80 and over  
Anti-Inflammatory Agents, Non-Steroidal: AD, administration & dosage  
\*Anti-Inflammatory Agents, Non-Steroidal: TU, therapeutic use  
Antineoplastic Agents: AD, administration & dosage  
\*Antineoplastic Agents: TU, therapeutic use  
Disease Progression



Double-Blind Method  
 Drug Therapy, Combination  
 Hydrocortisone: AD, administration & dosage

**\*Hydrocortisone: TU, therapeutic use**

Middle Aged

\*Pain: DT, drug therapy

\*Palliative Care

**\*Prostatic Neoplasms: DT, drug therapy**

Prostatic Neoplasms: PA, pathology

Prostatic Neoplasms: PP, physiopathology

Quality of Life

Suramin: AD, administration & dosage

\*Suramin: TU, therapeutic use

Treatment Outcome

RN 145-63-1 (Suramin); 50-23-7 (Hydrocortisone)

CN 0 (Anti-Inflammatory Agents, Non-Steroidal); 0 (Antineoplastic Agents)

=> d all 1141 1 2 4

L141 ANSWER 1 OF 56 MEDLINE on STN

AN 2000468935 MEDLINE

DN PubMed ID: 11022738

TI Inhibitors of the key enzymes of androgen synthesis: potential agents as targets for prostate cancer.

AU Takeda M; Hosaka M

CS Department of Urology, Yokohama City University School of Medicine.

SO Nippon rinsho. Japanese journal of clinical medicine, (2000 Jul)

58 Suppl 312-6. Ref: 14

Journal code: 0420546. ISSN: 0047-1852.

CY Japan

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW LITERATURE)

LA Japanese

FS Priority Journals

EM 200012

ED Entered STN: 20010322

Last Updated on STN: 20010322

Entered Medline: 20001212

CT Check Tags: Human; Male

17-Hydroxysteroid Dehydrogenases: AI, antagonists & inhibitors

\*Androgen Antagonists: TU, therapeutic use

\*Androsthenols: TU, therapeutic use

Animals

\*Antineoplastic Agents, Hormonal: TU, therapeutic use

\*Carbazoles: TU, therapeutic use

Enzyme Inhibitors: TU, therapeutic use

\*Imidazoles: TU, therapeutic use

**\*Ketoconazole: TU, therapeutic use**

**\*Prostatic Neoplasms: DT, drug therapy**

Steroid 17-alpha-Hydroxylase: AI, antagonists & inhibitors

\*Testosterone: BI, biosynthesis

RN 115575-11-6 (liarozole); 154229-19-3 (abiraterone); 58-22-0

(Testosterone); 65277-42-1 (Ketoconazole)

CN 0 (Androgen Antagonists); 0 (Androsthenols); 0 (Antineoplastic Agents,

Hormonal); 0 (Carbazoles); 0 (Enzyme Inhibitors); 0 (Imidazoles); 0 (YM 116); EC 1.1.- (17-Hydroxysteroid Dehydrogenases); EC 1.14.99.9 (Steroid 17-alpha-Hydroxylase)

L141 ANSWER 2 OF 56 MEDLINE on STN  
AN 2000434743 MEDLINE  
DN PubMed ID: 10564905  
TI Treating prostate cancer. Part V: androgen deprivation and chemotherapy.  
AU Anonymous  
SO Harvard men's health watch, (1999 Dec) 4 (5) 5-8. Ref: 0  
Journal code: 9802701. ISSN: 1089-1102.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Consumer Health  
EM 200009  
ED Entered STN: 20000928  
Last Updated on STN: 20000928  
Entered Medline: 20000921  
CT Check Tags: Human; Male  
\*Androgen Antagonists: TU, therapeutic use  
Estrogens: TU, therapeutic use  
Gonadorelin: AG, agonists  
**Ketoconazole: TU, therapeutic use**  
Orchiectomy  
**\*Prostatic Neoplasms: DT, drug therapy**  
Prostatic Neoplasms: SU, surgery  
RN 33515-09-2 (Gonadorelin); 65277-42-1 (Ketoconazole)  
CN 0 (Androgen Antagonists); 0 (Estrogens)

L141 ANSWER 4 OF 56 MEDLINE on STN  
AN 2000150750 MEDLINE  
DN PubMed ID: 10688042  
TI Efficacy of microtubule-active drugs followed by ketoconazole in human  
metastatic prostate cancer cell lines.  
AU Blagosklonny M V; Dixon S C; Figg W D  
CS Medicine Branch, Division of Clinical Sciences, National Cancer Institute,  
NIH, Bethesda, Maryland 20892, USA.  
SO Journal of urology, (2000 Mar) 163 (3) 1022-6.  
Journal code: 0376374. ISSN: 0022-5347.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Abridged Index Medicus Journals; Priority Journals  
EM 200003  
ED Entered STN: 20000327  
Last Updated on STN: 20000327  
Entered Medline: 20000316  
AB PURPOSE: Once a relapse occurs following primary endocrine treatment,  
metastatic prostate cancer is one of the most therapy-resistant human  
neoplasms. Ketoconazole is used for complete androgen deprivation, and  
recent data suggest it has direct activity against prostate cancer cells.  
MATERIALS AND METHODS: LNCaP, DU145, and PC3 cells, human prostate cancer  
cell lines, and HL60, a human leukemia cell line, were lysed and soluble  
proteins were harvested. Cells were plated in 96-well flat bottom plates  
and then exposed to the pharmacological agents, ketoconazole, vinblastine  
and paclitaxel. DNA synthesis was monitored by 3H-thymidine  
incorporation. RESULTS: We demonstrate that ketoconazole exerts a  
cytostatic effect on a panel of human prostate cancer cell lines, with  
IC50 of 4 to 5 microg./ml., 12 microg./ml., and 25 microg./ml. for LNCaP,  
PC3/PC3M, and DU145 cells, respectively. On the other hand, using  
microtubule-active drugs, vinblastine and paclitaxel, we found that PC3M

and PC3 cells were more resistant than either DU145 or LNCaP cells. This resistance was associated with a lesser degree of Raf-1 and Bcl-2 phosphorylation following exposure to microtubule-active drugs. Combinations of microtubule-active drugs with ketoconazole were a beneficial treatment in DU145 cancer cells. Furthermore, ketoconazole blocked recovery of all the prostate cancer cell lines following 24 hours-pulse treatment with vinblastine. CONCLUSION: Pulse-administration of vinblastine followed by continuous administration of ketoconazole warrants investigation in the treatment of hormone-independent metastatic prostate cancer.

CT Check Tags: Human; Male  
 \*Antineoplastic Agents: TU, therapeutic use  
 Drug Screening Assays, Antitumor  
 \*Ketoconazole: TU, therapeutic use  
 Microtubules: DE, drug effects  
 \*Paclitaxel: TU, therapeutic use  
 Phosphorylation: DE, drug effects  
 \*Prostatic Neoplasms: DT, drug therapy  
 \*Prostatic Neoplasms: SC, secondary  
 Tumor Cells, Cultured  
 \*Vinblastine: TU, therapeutic use  
 RN 33069-62-4 (Paclitaxel); 65277-42-1 (Ketoconazole); 865-21-4 (Vinblastine)  
 CN 0 (Antineoplastic Agents)

=> d all l142 1 2 4

L142 ANSWER 1 OF 45 MEDLINE on STN  
 AN 2000512716 MEDLINE  
 DN PubMed ID: 11071217  
 TI Androgen blockade in prostate cancer.  
 CM Comment on: Lancet. 2000 Apr 29;355(9214):1491-8. PubMed ID: 10801170  
 AU Labrie F; Candas B  
 SO Lancet, (2000 Jul 22) 356 (9226) 341-2.  
 Journal code: 2985213R. ISSN: 0140-6736.  
 CY ENGLAND: United Kingdom  
 DT Commentary  
 Letter  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals  
 EM 200011  
 ED Entered STN: 20010322  
 Last Updated on STN: 20011004  
 Entered Medline: 20001128  
 CT Check Tags: Human; Male  
 \*Androgen Antagonists: TU, therapeutic use  
 Cyproterone Acetate: TU, therapeutic use  
 \*Flutamide: TU, therapeutic use  
 \*Imidazoles: TU, therapeutic use  
 Meta-Analysis  
 Orchiectomy  
 \*Prostatic Neoplasms: DT, drug therapy  
 RN 13311-84-7 (Flutamide); 427-51-0 (Cyproterone Acetate); 63612-50-0  
 (nilutamide)  
 CN 0 (Androgen Antagonists); 0 (Imidazoles)

L142 ANSWER 2 OF 45 MEDLINE on STN  
 AN 2000511502 MEDLINE  
 DN PubMed ID: 11062379  
 TI Neoadjuvant hormone therapy: the Canadian trials.

AU Klotz L; Gleave M; Goldenberg S L  
CS Sunnybrook Health Science Center, University of Toronto, Toronto, Ontario, Canada.. Laurence.klotz@utoronto.ca  
SO Molecular urology, (2000 Fall) 4 (3) 233-7;discussion 239. Ref: 10  
Journal code: 9709255. ISSN: 1091-5362.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Priority Journals  
EM 200012  
ED Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20001207  
AB The Canadian Urologic Oncology Group has carried out three studies of neoadjuvant hormonal therapy (NHT) in prostate cancer. The first, a study of 3 months of cyproterone acetate (CPA) 100 mg TID in patients undergoing external-beam radiation therapy, showed a benefit with respect to time to biochemical progression. There are no survival or clinical progression data available from this study. The second study involved 3 months of CPA prior to radical prostatectomy compared with radical prostatectomy alone and enrolled 200 patients. The probability of biochemical progression at 36 months was similar in the two groups (CPA 40%; surgery alone 30%; P = 0.3233). More recently, we have carried out a randomized trial of 3 v 8 months of leuprolide plus flutamide prior to radical prostatectomy in 547 patients. Patients were stratified by clinical stage, Gleason grade, and serum prostate specific antigen (PSA) concentration. In the 3- and 8-month groups, presurgery PSA concentrations were <0.1 ng/mL in 35% v 73%, and >0.3 ng/mL in 37% v 10%, respectively. In the 3- and 8-month groups, the positive margin rates were 17% and 5% and the organ-confined rates 71% and 91% (P < 0.01). One-year follow-up is now available on the entire cohort. Data regarding time to biochemical and clinical progression and overall and disease-specific survival will be required to determine whether this change in the pathologic findings translates into a patient benefit.  
CT Check Tags: Human; Male  
\*Androgen Antagonists: TU, therapeutic use  
\*Antineoplastic Agents, Hormonal: TU, therapeutic use  
Antineoplastic Combined Chemotherapy Protocols: TU, therapeutic use  
Canada  
**Cyproterone Acetate: TU, therapeutic use**  
Disease Progression  
Flutamide: TU, therapeutic use  
Leuprolide: TU, therapeutic use  
Neoadjuvant Therapy  
Prostate-Specific Antigen: BL, blood  
Prostatectomy  
**\*Prostatic Neoplasms: DT, drug therapy**  
Prostatic Neoplasms: PA, pathology  
Prostatic Neoplasms: TH, therapy  
Randomized Controlled Trials  
Survival Rate  
RN 13311-84-7 (Flutamide); 427-51-0 (Cyproterone Acetate); 53714-56-0 (Leuprolide)  
CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal); 0 (Antineoplastic Combined Chemotherapy Protocols); EC 3.4.21.77 (Prostate-Specific Antigen)

L142 ANSWER 4 OF 45 MEDLINE on STN  
AN 2000394289 MEDLINE  
DN PubMed ID: 10925096  
TI Long-term neoadjuvant hormone therapy prior to radical prostatectomy:  
evaluation of risk for biochemical recurrence at 5-year follow-up.  
AU Gleave M E; La Bianca S E; Goldenberg S L; Jones E C; Bruchovsky N;  
Sullivan L D  
CS Division of Urology, University of British Columbia, Vancouver General  
Hospital, Vancouver, British Columbia, Canada.  
SO Urology, (2000 Aug 1) 56 (2) 289-94.  
Journal code: 0366151. ISSN: 1527-9995.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200008  
ED Entered STN: 20000824  
Last Updated on STN: 20010521  
Entered Medline: 20000814  
AB OBJECTIVES: To assess the effects of 8 months of neoadjuvant therapy on  
pathologic stage and biochemical recurrence rates. METHODS: One hundred  
fifty-six men with clinically localized prostate cancer were treated with  
neoadjuvant combined androgen withdrawal therapy for 8 months prior to  
radical prostatectomy. Preoperative clinical stage, Gleason score, and  
serum prostate-specific antigen (PSA) levels were compared with treatment  
outcome (pathologic stage and PSA recurrence). RESULTS: PSA at diagnosis  
was 10 microg/L or higher in 36% with a mean of 11.5 microg/L. Clinical  
stage was T1c in 18%, T2 in 74%, and T3a in 8%. Gleason score was 6 or  
lower in 76% and 7 or higher in 24%. Pathologic stage was T0 in 13%, T2  
in 66%, T3 (specimen confined) in 13%, T3 (margin positive) in 6%, and  
TxN+ in 2%. Incidence of positive margins increased with clinical stage  
T3a versus organ-confined disease (25% versus 4%,  $P < 0.05$ ), pretreatment  
Gleason scores 7 or higher versus Gleason scores 6 or lower (11% versus  
4%,  $P = \text{NS}$ ), and pretreatment PSA levels higher than 10 microg/L compared  
with PSA levels lower than 10 microg/L (15% versus 0%,  $P < 0.01$ ). Overall  
PSA recurrence rate was 12.2% after a mean postoperative follow-up of 54  
months. Risk of PSA recurrence increased with clinical stage (25% T3  
versus 11% organ confined,  $P < 0.01$ ), pretreatment PSA (7% if PSA lower  
than 10 microg/L versus 21% if 10 microg/L or higher,  $P < 0.02$ ), Gleason  
score (9% if 6 or lower versus 22% if 7 or higher,  $P < 0.02$ ), and  
pathologic stage (6% of pT2, 24% of pT3M-, and 56% of pT3M+,  $P < 0.01$ ).  
PSA recurrences occurred in 6% of patients with no adverse preoperative  
risk factors, 12% with any one of the high-risk factors, and 29% with any  
two of the high-risk factors. CONCLUSIONS: Risk of PSA recurrence after 8  
months of neoadjuvant therapy is low after 5 years of follow-up and  
remains proportional to the presence of adverse preoperative risk factors.  
Prospective randomized studies are required to determine whether longer  
duration of neoadjuvant therapy reduces the risk of biochemical recurrence  
after radical prostatectomy.  
CT Check Tags: Human; Male  
Adult  
Aged  
\*Androgen Antagonists: TU, therapeutic use  
\*Antineoplastic Agents, Hormonal: TU, therapeutic use  
Combined Modality Therapy  
Cyproterone Acetate: TU, therapeutic use  
Diethylstilbestrol: TU, therapeutic use  
Drug Therapy, Combination  
Flutamide: TU, therapeutic use  
Follow-Up Studies

Leuprolide: TU, therapeutic use  
 Lymph Node Excision  
 Middle Aged  
 \*Neoadjuvant Therapy  
 Postoperative Complications: EP, epidemiology  
 \*Prostatectomy  
 Prostatic Neoplasms: DI, diagnosis  
   **\*Prostatic Neoplasms: DT, drug therapy**  
 \*Prostatic Neoplasms: SU, surgery  
 Recurrence  
 Treatment Outcome  
 RN 13311-84-7 (Flutamide); 427-51-0 (Cyproterone Acetate); 53714-56-0  
 (Leuprolide); 56-53-1 (Diethylstilbestrol)  
 CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal)

=> d all l143 1 2 5

L143 ANSWER 1 OF 293 MEDLINE on STN  
 AN 2002005232 MEDLINE  
 DN PubMed ID: 11194670  
 TI [Radical prostatectomy with broadened scope of indications - analysis of  
 early experience].  
 Radikalna prostatektomiia s razshireni pokazaniia - nachalen opit.  
 AU Chakarov S; Bechev R; Lazarov Z; Fachikov Ts; Rangelov S  
 CS Government University Hospital "St Anna," Urologic Clinic, Medical  
 University, Sofia, Bulgaria.  
 SO Khirurgiia, (1999) 55 (3) 47-8.  
 Journal code: 0376355. ISSN: 0450-2167.  
 CY Bulgaria  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA Bulgarian  
 FS Priority Journals  
 EM 200201  
 ED Entered STN: 20020121  
 Last Updated on STN: 20020128  
 Entered Medline: 20020123  
 CT Check Tags: Human; Male  
 Acid Phosphatase: AN, analysis  
 Acid Phosphatase: BL, blood  
 Aged  
 Androgen Antagonists: TU, therapeutic use  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Biopsy  
   **Flutamide: TU, therapeutic use**  
 Goserelin: TU, therapeutic use  
 Middle Aged  
 Prostate-Specific Antigen: BL, blood  
 \*Prostatectomy: MT, methods  
 Prostatic Neoplasms: DI, diagnosis  
   **Prostatic Neoplasms: DT, drug therapy**  
 Prostatic Neoplasms: SC, secondary  
 \*Prostatic Neoplasms: SU, surgery  
 RN 13311-84-7 (Flutamide); 65807-02-5 (Goserelin)  
 CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal); EC 3.1.3.2  
 (Acid Phosphatase); EC 3.4.21.77 (Prostate-Specific Antigen)

L143 ANSWER 2 OF 293 MEDLINE on STN  
 AN 2001353116 MEDLINE  
 DN PubMed ID: 11114872

TI Noadjuvant hormone therapy and radical radiotherapy for localized prostate cancer: poorer biochemical outcome using flutamide alone.  
 AU Wilson K S; Ludgate C M; Wilson A G; Alexander A S  
 CS University of British Columbia, Vancouver, BC, Canada.  
 SO Canadian journal of urology, (2000 Oct) 7 (5) 1099-103.  
 Journal code: 9515842. ISSN: 1195-9479.  
 CY Canada  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200106  
 ED Entered STN: 20010625  
 Last Updated on STN: 20010625  
 Entered Medline: 20010621  
 AB Since a recent meta-analysis of non-steroidal anti-androgen therapy in metastatic prostate cancer concluded that survival was worse compared with medical or surgical androgen withdrawal, we analyzed our experience with flutamide monotherapy and other forms of neoadjuvant hormone therapy (NHT) prior to radiation therapy in clinically localized prostate cancer. A total of 45 patients received flutamide and 328 patients received other NHT. Flutamide patients had higher PSA levels at diagnosis and shorter duration of treatment, which could bias the results against flutamide monotherapy. Kaplan Meier analysis of PSA -- disease free survival showed significantly poorer outcome with flutamide monotherapy. Multivariate analysis supported this conclusion. Until equivalence to other forms of NHT is shown, we do not recommend flutamide monotherapy prior to radical radiation. A prospective randomized trial would be necessary to confirm this conclusion.  
 CT Check Tags: Comparative Study; Human; Male; Support, Non-U.S. Gov't  
 \*Adenocarcinoma: DT, drug therapy  
 Adenocarcinoma: PA, pathology  
 \*Adenocarcinoma: RT, radiotherapy  
 \*Androgen Antagonists: TU, therapeutic use  
 \*Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Chi-Square Distribution  
 \*Flutamide: TU, therapeutic use  
 Multivariate Analysis  
 Neoadjuvant Therapy  
 Neoplasm Staging  
 Prostate-Specific Antigen: BL, blood  
 \*Prostatic Neoplasms: DT, drug therapy  
 Prostatic Neoplasms: PA, pathology  
 \*Prostatic Neoplasms: RT, radiotherapy  
 Radiotherapy Dosage  
 Regression Analysis  
 RN 13311-84-7 (Flutamide)  
 CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal); EC 3.4.21.77 (Prostate-Specific Antigen)  
 L143 ANSWER 5 OF 293 MEDLINE on STN  
 AN 2001043137 MEDLINE  
 DN PubMed ID: 11095136  
 TI A prospective randomized multicenter study of chlormadinone acetate versus flutamide in total androgen blockade for prostate cancer.  
 AU Ozono S; Okajima E; Yamaguchi A; Yoshikawa M; Iwai A; Moriya A; Yoshida K; Samma S; Maruyama Y; Hirao Y  
 CS Department of Urology, Nara Medical University, Kashihara, Japan..  
 ozn-kkr@nmu-gw.naramed-u.ac.jp  
 SO Japanese journal of clinical oncology, (2000 Sep) 30 (9) 389-96.  
 Journal code: 0313225. ISSN: 0368-2811.

CY Japan  
 DT (CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 (MULTICENTER STUDY)  
 (RANDOMIZED CONTROLLED TRIAL)  
 LA English  
 FS Priority Journals  
 EM 200012  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001207  
 AB BACKGROUND: A randomized multicenter study was conducted to investigate the efficacy of total androgen blockade (TAB) for patients with previously untreated prostate cancer using the steroidal anti-androgen chlormadinone acetate (CMA) and the non-steroidal anti-androgen flutamide. We also compared the liver dysfunction in these two arms. METHODS: From November 1995 to October 1997, 71 patients were registered into this study and 70 of them were eligible. RESULTS: There was no significant difference in the efficacy of TAB between CMA and flutamide at 24 weeks. The testosterone and prostate-specific antigen (PSA) levels in patients administered flutamide (Group II) increased significantly 3 days after the first dose of LH-RH analog, whereas no such increase was observed in patients administered CMA (Group I), indicating that CMA prevented the flare-up. Parameters of liver function, serum GOT and GPT levels, which were normal at the baseline, became abnormal in 30.0% and 35.3%, respectively, of patients in Group II. These figures were significantly higher than the corresponding figures of 6.3% and 12.5%, respectively, in Group I. When the degree of change in each of these parameters was analyzed, both GOT and GPT levels showed a significantly greater increase in Group II than in Group I. CONCLUSION: These results indicate that attention must be paid to changes in liver function during the administration of flutamide in patients with prostate cancer even if their baseline liver function is normal. It is also suggested that CMA may be better tolerated from the viewpoint of the drug effects on liver function.  
 CT Check Tags: Human; Male  
 \*Adenocarcinoma: DT, drug therapy  
 Adenocarcinoma: PP, physiopathology  
 Aged  
 \*Androgen Antagonists: TU, therapeutic use  
 \*Antineoplastic Agents, Hormonal: TU, therapeutic use  
 \*Chlormadinone Acetate: AA, analogs & derivatives  
 \*Chlormadinone Acetate: TU, therapeutic use  
 \*Enzyme Inhibitors: TU, therapeutic use  
 \*Flutamide: TU, therapeutic use  
 Liver: PP, physiopathology  
 Prospective Studies  
 \*Prostatic Neoplasms: DT, drug therapy  
 Prostatic Neoplasms: PP, physiopathology  
 RN 13311-84-7 (Flutamide); 302-22-7 (Chlormadinone Acetate); 3114-44-1 (chlormadinol acetate)  
 CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal); 0 (Enzyme Inhibitors)

=> d all l144 1-3

L144 ANSWER 1 OF 17 MEDLINE on STN  
 AN 2000476033 MEDLINE  
 DN PubMed ID: 11026565  
 TI 1,25-Dihydroxyvitamin D3 decreases human prostate cancer cell adhesion and



migration.

AU Sung V; Feldman D  
 CS Department of Medicine, Stanford University School of Medicine, CA  
 94305-5103, USA.  
 NC DK42482 (NIDDK)  
 T32 DK07217 (NIDDK)  
 SO Molecular and cellular endocrinology, (2000 Jun) 164 (1-2)  
 133-43.  
 Journal code: 7500844. ISSN: 0303-7207.  
 CY Ireland  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200102  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20010208

AB 1,25-Dihydroxyvitamin-D3 [1,25(OH)2D3], the active hormonal metabolite of  
 vitamin D, acts through a specific nuclear receptor to inhibit  
 proliferation and promote differentiation of several tumor cell types  
 including the LNCaP, DU145 and PC-3 prostate cancer cell lines as well as  
 primary prostate tumor lines. 1,25(OH)2D3 can also decrease invasion of  
 breast and prostate cancer cell lines in vitro. We confirm this latter  
 finding in the DU145 and PC-3 prostate cancer cell lines, and further show  
 that 1,25(OH)2D3 inhibits overall invasion, cell adhesion and migration to  
 the basement membrane matrix protein laminin. These changes appear to be  
 due in part to a 1,25(OH)2D3-induced decrease in expression of alpha6 and  
 beta4 integrins, both of which are receptors for laminin and associated  
 with increased migration and invasion of prostate cancer cells in vitro.  
 Blocking function of these particular integrins with antibodies inhibits  
 both adhesion and migration of the cells. Collectively, these data  
 demonstrate that 1,25(OH)2D3, in addition to decreasing proliferation of  
 tumor cells, can also inhibit prostate cancer cell invasion through  
 modulation of select cell surface adhesion molecules.

CT Check Tags: Human; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't,  
 Non-P.H.S.; Support, U.S. Gov't, P.H.S.  
 \*Calcitriol: PD, pharmacology  
     **Calcitriol: TU, therapeutic use**  
 \*Calcium Channel Agonists: PD, pharmacology  
     Calcium Channel Agonists: TU, therapeutic use  
     Cell Adhesion: DE, drug effects  
 \*Cell Movement: DE, drug effects  
     **\*Prostatic Neoplasms: DT, drug therapy**  
 \*Prostatic Neoplasms: PA, pathology  
     Tumor Cells, Cultured

RN 32222-06-3 (Calcitriol)  
 CN 0 (Calcium Channel Agonists)

L144 ANSWER 2 OF 17 MEDLINE on STN  
 AN 2000168596 MEDLINE  
 DN PubMed ID: 10706079  
 TI A calcitriol analogue, EB1089, inhibits the growth of LNCaP tumors in nude  
 mice.  
 CM Comment in: Cancer Res. 2001 May 15;61(10):4294. PubMed ID: 11358859  
 AU Blutt S E; Polek T C; Stewart L V; Kattan M W; Weigel N L  
 CS Department of Molecular and Cellular Biology, Baylor College of Medicine,  
 Houston, Texas 77030, USA.  
 NC CA58204 (NCI)  
 CA75337 (NCI)  
 SO Cancer research, (2000 Feb 15) 60 (4) 779-82.

Journal code: 2984705R. ISSN: 0008-5472.

CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200003  
ED Entered STN: 20000330  
Last Updated on STN: 20011025  
Entered Medline: 20000320

AB Limited options for the treatment of prostate cancer have spurred the search for new therapies. One innovative approach is the use of 1alpha,25-dihydroxyvitamin D3 (calcitriol) analogues to inhibit cancer growth. We demonstrate here that the calcitriol analogue, EB1089, extensively inhibits the growth of LNCaP prostate cancer cells in culture and causes the cells to both accumulate in G0-G1 and undergo apoptosis. Importantly, we found that EB1089 inhibits the growth of LNCaP tumor xenografts in nude mice. Because of these antiproliferative properties in vivo, EB1089 is a potential new therapeutic agent for the treatment of prostate cancer.

CT Check Tags: Human; Male; Support, U.S. Gov't, P.H.S.  
Animals  
\*Antineoplastic Agents: TU, therapeutic use  
Apoptosis: DE, drug effects  
\*Calcitriol: AA, analogs & derivatives  
    **Calcitriol: TU, therapeutic use**  
Calcium: BL, blood  
Cell Cycle: DE, drug effects  
Mice  
Mice, Nude  
    **\*Prostatic Neoplasms: DT, drug therapy**  
Prostatic Neoplasms: PA, pathology  
Tumor Cells, Cultured

RN 134404-52-7 (seocalcitol); 32222-06-3 (Calcitriol); 7440-70-2 (Calcium)  
CN 0 (Antineoplastic Agents)

L144 ANSWER 3 OF 17 MEDLINE on STN  
AN 2000118058 MEDLINE  
DN PubMed ID: 10639196  
TI Calcium, lycopene, vitamin D and prostate cancer.  
CM Comment on: Prostate. 1999 Sep 1;40(4):261-8. PubMed ID: 10420155  
AU Grant W B  
SO Prostate, (2000 Feb 15) 42 (3) 243.  
Journal code: 8101368. ISSN: 0270-4137.

CY United States  
DT Commentary  
Letter  
LA English  
FS Priority Journals  
EM 200002  
ED Entered STN: 20000309  
Last Updated on STN: 20000427  
Entered Medline: 20000223

CT Check Tags: Human; Male  
Anticarcinogenic Agents: TU, therapeutic use  
\*Calcium: ME, metabolism  
\*Carotenoids: TU, therapeutic use  
Diet  
    **Prostatic Neoplasms: DT, drug therapy**  
Prostatic Neoplasms: EP, epidemiology  
\*Prostatic Neoplasms: ET, etiology

Prostatic Neoplasms: PC, prevention & control  
 Vitamin D: ME, metabolism

**\*Vitamin D: TU, therapeutic use**

RN 1406-16-2 (Vitamin D); 36-88-4 (Carotenoids); 502-65-8 (lycopene);  
 7440-70-2 (Calcium)  
 CN 0 (Anticarcinogenic Agents)

=> d all 1145 2 3 5

L145 ANSWER 2 OF 985 MEDLINE on STN  
 AN 2000507230 MEDLINE  
 DN PubMed ID: 11056493  
 TI Exploitable mechanisms for the blockade of androgenic action.  
 AU Griffiths K; Denis L J  
 CS Tenovus Cancer Research Centre, University of Wales College of Medicine,  
 Cardiff, Wales, UK.  
 SO Prostate. Supplement, (2000) 10 43-51. Ref: 50  
 Journal code: 9003050. ISSN: 1050-5881.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW, TUTORIAL)  
 LA English  
 FS Priority Journals  
 EM 200011  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001115  
 CT Check Tags: Human; Male  
 \*Androgen Antagonists: TU, therapeutic use  
 Drug Therapy, Combination  
 Enzyme Inhibitors: TU, therapeutic use  
**Estrogens: TU, therapeutic use**  
 Finasteride: TU, therapeutic use  
 Forecasting  
 Intracellular Membranes: PH, physiology  
**\*Prostatic Neoplasms: DT, drug therapy**  
 Protein-Tyrosine Kinase: AI, antagonists & inhibitors  
 Signal Transduction: PH, physiology  
 RN 98319-26-7 (Finasteride)  
 CN 0 (Androgen Antagonists); 0 (Enzyme Inhibitors); 0 (Estrogens); EC  
 2.7.1.112 (Protein-Tyrosine Kinase)

L145 ANSWER 3 OF 985 MEDLINE on STN  
 AN 2000507227 MEDLINE  
 DN PubMed ID: 11056490  
 TI Endocrine treatment: expected duration stage by stage.  
 AU Schroder F H  
 CS Department of Urology, Academic Hospital and Erasmus University,  
 Rotterdam, The Netherlands.. vanalphen@urol.azr.nl  
 SO Prostate. Supplement, (2000) 10 26-31. Ref: 31  
 Journal code: 9003050. ISSN: 1050-5881.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW, TUTORIAL)  
 LA English  
 FS Priority Journals  
 EM 200011

ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001115  
 CT Check Tags: Human; Male  
 \*Androgen Antagonists: TU, therapeutic use  
 Disease Progression  
 \***Estrogens: TU, therapeutic use**  
 Neoplasms Staging  
 \*Prostate-Specific Antigen: BL, blood  
 \*Prostatectomy  
**Prostatic Neoplasms: DT, drug therapy**  
 Prostatic Neoplasms: IM, immunology  
 \*Prostatic Neoplasms: PA, pathology  
 Prostatic Neoplasms: SU, surgery  
 \*Prostatic Neoplasms: TH, therapy  
 Time Factors  
 CN 0 (Androgen Antagonists); 0 (Estrogens); EC 3.4.21.77 (Prostate-Specific Antigen)

L145 ANSWER 5 OF 985 MEDLINE on STN  
 AN 2000468915 MEDLINE  
 DN PubMed ID: 11022718  
 TI Revaluation of estrogen therapy on prostate cancer.  
 AU Takezawa Y; Kobayashi M; Yamanaka H  
 CS Department of Urology, Iseki Municipal Hospital.  
 SO Nippon rinsho. Japanese journal of clinical medicine, (2000 Jul)  
 58 Suppl 223-7. Ref: 15  
 Journal code: 0420546. ISSN: 0047-1852.  
 CY Japan  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW LITERATURE)  
 LA Japanese  
 FS Priority Journals  
 EM 200012  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001212  
 CT Check Tags: Human; Male  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
**Diethylstilbestrol: TU, therapeutic use**  
 \***Estrogens: TU, therapeutic use**  
**Estrogens, Non-Steroidal: TU, therapeutic use**  
 \*Neoplasms, Hormone-Dependent: DT, drug therapy  
 \***Prostatic Neoplasms: DT, drug therapy**  
 RN 56-53-1 (Diethylstilbestrol)  
 CN 0 (Antineoplastic Agents, Hormonal); 0 (Estrogens); 0 (Estrogens, Non-Steroidal)

=> d all l146 1-3

L146 ANSWER 1 OF 97 MEDLINE on STN  
 AN 2002005232 MEDLINE  
 DN PubMed ID: 11194670  
 TI [Radical prostatectomy with broadened scope of indications - analysis of early experience].  
 Radikalna prostatektomiia s razshireni pokazaniia - nachalen opit.  
 AU Chakarov S; Bechev R; Lazarov Z; Fachikov Ts; Rangelov S  
 CS Government University Hospital "St Anna," Urologic Clinic, Medical

University, Sofia, Bulgaria.  
SO Khirurgiia, (1999) 55 (3) 47-8.  
Journal code: 0376355. ISSN: 0450-2167.  
CY Bulgaria  
DT Journal; Article; (JOURNAL ARTICLE)  
LA Bulgarian  
FS Priority Journals  
EM 200201  
ED Entered STN: 20020121  
Last Updated on STN: 20020128  
Entered Medline: 20020123  
CT Check Tags: Human; Male  
Acid Phosphatase: AN, analysis  
Acid Phosphatase: BL, blood  
Aged  
Androgen Antagonists: TU, therapeutic use  
Antineoplastic Agents, Hormonal: TU, therapeutic use  
Biopsy  
Flutamide: TU, therapeutic use  
**Goserelin: TU, therapeutic use**  
Middle Aged  
Prostate-Specific Antigen: BL, blood  
\*Prostatectomy: MT, methods  
Prostatic Neoplasms: DI, diagnosis  
**Prostatic Neoplasms: DT, drug therapy**  
Prostatic Neoplasms: SC, secondary  
\*Prostatic Neoplasms: SU, surgery  
RN 13311-84-7 (Flutamide); 65807-02-5 (Goserelin)  
CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal); EC 3.1.3.2  
(Acid Phosphatase); EC 3.4.21.77 (Prostate-Specific Antigen)

L146 ANSWER 2 OF 97 MEDLINE on STN  
AN 2001155404 MEDLINE  
DN PubMed ID: 11168686  
TI Prostate cancer with multiple lung metastases in a hemodialysis patient.  
AU Hayakawa K; Matsumoto M; Aoyagi T; Miyaji K; Hata M  
CS Department of Urology, Tokyo Dental College, Ichikawa General Hospital,  
Chiba, Japan.. hayakawa@tdc.ac.jp  
SO International journal of urology : official journal of the Japanese  
Urological Association, (2000 Dec) 7 (12) 464-6.  
Journal code: 9440237. ISSN: 0919-8172.  
CY Australia  
DT (CASE REPORTS)  
Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200103  
ED Entered STN: 20010404  
Last Updated on STN: 20010404  
Entered Medline: 20010322  
AB In hemodialysis patients, few cases of prostate cancer have been reported  
until recently. We present a case of prostate cancer with multiple lung  
metastases in a chronic hemodialysis patient. A 65-year-old Japanese man  
who had maintained hemodialysis for 5 years was referred to our hospital  
with multiple metastatic lung tumors. Serum prostate tumor markers were  
highly elevated although his plasma testosterone level was within the  
normal range. A transrectal needle prostate biopsy confirmed a histologic  
diagnosis of moderately differentiated adenocarcinoma. Androgen blockade  
therapy was very effective as evidenced by a quick decrease of serum tumor  
markers. The follow-up computed tomography scan of the chest performed 3

months later showed a complete disappearance of the coin lesions. The early detection of prostate cancer in hemodialysis patients is difficult because of a lack of urologic symptoms, which indicate the importance of periodic screening by serum tumor markers. Combined androgen blockade is effective even in hemodialysis patients. However, close follow up is necessary because long-term results and prognoses are still unknown.

CT Check Tags: Human; Male  
 Adenocarcinoma: DT, drug therapy  
 \*Adenocarcinoma: PA, pathology  
 Adenocarcinoma: RA, radiography  
 \*Adenocarcinoma: SC, secondary  
 Aged  
 Androgen Antagonists: TU, therapeutic use  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Drug Therapy, Combination  
 Flutamide: TU, therapeutic use  
**Goserelin: TU, therapeutic use**  
 Lung Neoplasms: RA, radiography  
 \*Lung Neoplasms: SC, secondary  
**Prostatic Neoplasms: DT, drug therapy**  
 \*Prostatic Neoplasms: PA, pathology  
 Radiography, Thoracic  
 \*Renal Dialysis  
 Tomography, X-Ray Computed  
 RN 13311-84-7 (Flutamide); 65807-02-5 (Goserelin)  
 CN 0 (Androgen Antagonists); 0 (Antineoplastic Agents, Hormonal)

L146 ANSWER 3 OF 97 MEDLINE on STN  
 AN 2001006516 MEDLINE  
 DN PubMed ID: 11010743  
 TI Goserelin and locally advanced prostate cancer: new indication. Pros and cons.  
 AU Anonymous  
 SO Prescrire international, (2000 Jun) 9 (47) 75-6.  
 Journal code: 9439295. ISSN: 1167-7422.  
 CY France  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Health Technology  
 EM 200009  
 ED Entered STN: 20010223  
 Last Updated on STN: 20010223  
 Entered Medline: 20000922  
 AB (1) Goserelin, a GnRH agonist, has a new licensed indication in France, as an adjuvant to external radiotherapy for locally advanced prostate cancer. (2) The clinical file in this indication includes two trials of satisfactory methodological quality comparing radiotherapy + goserelin with radiotherapy alone. (3) In these trials the radiotherapy + goserelin combination increased the specific-symptom-free survival time. (4) In one trial goserelin caused endocrine disorders in 19% of patients. There were also more cases of urinary incontinence (13% in absolute values) among patients receiving the radiotherapy + goserelin combination. Furthermore, goserelin almost always causes impotence and reduced libido.  
 CT Check Tags: Comparative Study; Human; Male  
 Aged  
 Antineoplastic Agents, Hormonal: AD, administration & dosage  
 Antineoplastic Agents, Hormonal: AE, adverse effects  
 Antineoplastic Agents, Hormonal: TU, therapeutic use  
 Clinical Trials  
 Endocrine Diseases: CI, chemically induced

France  
 Gonadorelin: AG, agonists  
 \*Goserelin  
 Goserelin: AD, administration & dosage  
 Goserelin: AE, adverse effects  
**Goserelin: TU, therapeutic use**  
 Impotence: CI, chemically induced  
 Libido: DE, drug effects  
 \*Prostatic Neoplasms  
**Prostatic Neoplasms: DT, drug therapy**  
 Prostatic Neoplasms: RT, radiotherapy  
 Treatment Outcome  
 Urinary Incontinence: CI, chemically induced  
 RN 33515-09-2 (Gonadorelin); 65807-02-5 (Goserelin)  
 CN 0 (Antineoplastic Agents, Hormonal)

=> d all 1147 2 3 5

L147 ANSWER 2 OF 11 MEDLINE on STN  
 AN 90282023 MEDLINE  
 DN PubMed ID: 2191570  
 TI Clinical studies on endocrine therapy of prostatic carcinoma (2):  
 Prognosis of patients with prostatic carcinoma given endocrine therapy,  
 and analyses of causes of death and side effects of endocrine therapy.  
 AU Kumamoto Y; Tsukamoto T; Umehara T; Shimazaki J; Fuse H; Oshima H;  
 Takeuchi H; Yoshida O; Okada K; Saito Y; +  
 CS Department of Urology, Sapporo Medical College.  
 SO Hinyokika kiyō. Acta urologica Japonica, (1990 Mar) 36 (3)  
 285-93.  
 Journal code: 0421145. ISSN: 0018-1994.  
 CY Japan  
 DT (CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 (MULTICENTER STUDY)  
 LA Japanese  
 FS Priority Journals  
 EM 199007  
 ED Entered STN: 19900824  
 Last Updated on STN: 19900824  
 Entered Medline: 19900719  
 AB Of 572 patients with prostatic carcinoma, 497 received endocrine therapy  
 as the initial treatment. These patients were surveyed in a cooperative  
 research study by members from five universities. Prognosis, causes of  
 death and side effects of estrogen therapy were studied. The prognosis of  
 patients who had received endocrine therapy became worse, as the stage  
 progressed. The prognosis of those who had received a combination of  
 estrogen therapy with castration tended to be better than that of those  
 who had received estrogen therapy alone. Similarly, the prognosis of  
 those who had received a combination of progesterone therapy with  
 castration tended to be better than that of those who had had progesterone  
 therapy alone. No relationship was found between estrogen doses (low,  
 medium and high) and prognosis, although a precise comparison among the  
 three could not be made because of the smaller number of patents with low  
 doses. A high dose of estrogen may not always be the indication, rather a  
 medium dose such as 300 mg diethylstilbestrol diphosphate may be  
 clinically appropriate. The cause of death could be identified in 303  
 patients who had received endocrine therapy. Cancer-related death was the  
 most frequent (63.7%), and cardio- or cerebrovascular death accounted for  
 only 14.2% of the cases. When this analysis was confined to the patients

who had received estrogen therapy, estrogen administration seemed to be the cause of cardio- or cerebrovascular death of 16.1% of the patients. Daily dosing of estrogen was not definitely related to the incidence, or the interval to cardio- or cerebrovascular death. However, among the patients who had died of cardio- or cerebrovascular disease, 50% of the patients who had received a medium or high dose of estrogen tended to die within two years after treatment, while 50% of those who had received a low dose died within three years.

CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
Cause of Death  
English Abstract  
Estrogens: AE, adverse effects  
\*Estrogens: TU, therapeutic use  
Japan: EP, epidemiology  
Multicenter Studies  
\*Neoplasms, Hormone-Dependent: DT, drug therapy  
Neoplasms, Hormone-Dependent: EP, epidemiology  
Neoplasms, Hormone-Dependent: MO, mortality  
Progesterone: AE, adverse effects  
\*Progesterone: TU, therapeutic use  
Prognosis  
\*Prostatic Neoplasms: DT, drug therapy  
Prostatic Neoplasms: EP, epidemiology  
Prostatic Neoplasms: MO, mortality  
RN 57-83-0 (Progesterone)  
CN 0 (Estrogens)

L147 ANSWER 3 OF 11 MEDLINE on STN  
AN 89382122 MEDLINE  
DN PubMed ID: 2570857  
TI A new approach to prostate cancer.  
AU Ito Y Z; Nakazato Y; Petrow V  
CS College of Medical Care and Technology, Gunma University, Department of Pathology, Gunma University School of Medicine, Japan.  
SO Journal of pharmacy and pharmacology, (1989 Jul) 41 (7) 488-9.  
Journal code: 0376363. ISSN: 0022-3573.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198910  
ED Entered STN: 19900309  
Last Updated on STN: 19950206  
Entered Medline: 19891020  
AB Growth of androgen-dependent human prostatic adenocarcinoma implanted in the nude mouse (Honda tumour), is inhibited by 6-methyleneprogesterone. This steroid is a potent inhibitor of both rat and human prostatic 5 alpha-reductase in-vitro. In-vivo, at the studied dose level, it reduces metabolic conversion of testosterone to dihydrotestosterone with minimal effects upon circulating LH and testosterone. These data support the hypothesis that dihydrotestosterone and not testosterone is the main trophic androgen of the human prostatic neoplasm.  
CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
\*Adenoma: DT, drug therapy  
Adenoma: PP, physiopathology  
Animals  
Disease Models, Animal  
Mice  
Mice, Nude  
Neoplasm Transplantation



Organ Weight: DE, drug effects  
 \*Progesterone: AA, analogs & derivatives

**Progesterone: TU, therapeutic use**

Prostate: DE, drug effects

**\*Prostatic Neoplasms: DT, drug therapy**

Prostatic Neoplasms: PP, physiopathology

Seminal Vesicles: DE, drug effects

RN 19457-57-9 (6-methylene-4-pregnene-3,20-dione); 57-83-0 (Progesterone)

L147 ANSWER 5 OF 11 MEDLINE on STN

AN 80229109 MEDLINE

DN PubMed ID: 6156222

TI Treatment of metastatic bone cancer.

AU Fukuma H

SO Nippon Seikeigeka Gakkai zasshi, (1980 Apr) 54 (4) 403-11.

Journal code: 0413716. ISSN: 0021-5325.

CY Japan

DT Journal; Article; (JOURNAL ARTICLE)

LA Japanese

FS Priority Journals

EM 198009

ED Entered STN: 19900315

Last Updated on STN: 19900315

Entered Medline: 19800923

CT Check Tags: Female; Human; Male

Adult

Aged

Androgens: TU, therapeutic use

Bone Neoplasms: DT, drug therapy

\*Bone Neoplasms: SC, secondary

Bone Neoplasms: SU, surgery

Breast Neoplasms: DT, drug therapy

Breast Neoplasms: SU, surgery

Estrogens: TU, therapeutic use

Fracture Fixation, Internal

Laminectomy

Middle Aged

Palliative Care

**Progesterone: TU, therapeutic use**

**Prostatic Neoplasms: DT, drug therapy**

Prostatic Neoplasms: SU, surgery

RN 57-83-0 (Progesterone)

CN 0 (Androgens); 0 (Estrogens)

=> d all l148 1 3 4

L148 ANSWER 1 OF 107 MEDLINE on STN

AN 2002341685 MEDLINE

DN PubMed ID: 12084334

TI Neoadjuvant hormone therapy before radical prostatectomy does not improve disease-specific survival.

AU Steiner M S

CS Department of Urology, University of Tennessee, Memphis, 956 Court Avenue, Room H216, Memphis, TN 38163, USA.. Msteiner@utmem.edu

SO Current urology reports, (2000 May) 1 (1) 7-8.

Journal code: 100900943. ISSN: 1527-2737.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals  
EM 200302  
ED Entered STN: 20020627  
Last Updated on STN: 20030226  
Entered Medline: 20030225  
CT Check Tags: Human; Male  
\*Antineoplastic Agents, Hormonal: TU, therapeutic use  
Chemotherapy, Adjuvant  
\***Leuprolide: TU, therapeutic use**  
Preoperative Care  
\*Prostatectomy  
\***Prostatic Neoplasms: DT, drug therapy**  
\*Prostatic Neoplasms: MO, mortality  
Prostatic Neoplasms: SU, surgery  
Survival Rate  
RN 53714-56-0 (Leuprolide)  
CN 0 (Antineoplastic Agents, Hormonal)

L148 ANSWER 3 OF 107 MEDLINE on STN  
AN 2001110504 MEDLINE  
DN PubMed ID: 11096250  
TI Expression of estrogen receptor alpha and beta mRNAs in prostate cancers treated with leuporelin acetate.  
AU Maruyama S; Fujimoto N; Asano K; Ito A; Usui T  
CS Department of Cancer Research, Research Institute for Radiation Biology and Medicine (RIRBM), Hiroshima University, Hiroshima, Japan.  
SO European urology, (2000 Nov) 38 (5) 635-9.  
Journal code: 7512719. ISSN: 0302-2838.  
CY Switzerland  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200102  
ED Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20010202  
AB OBJECTIVE: The discovery of a novel estrogen receptor (ER), ER-beta, has given rise to new possibilities regarding estrogen's roles in the prostate. Although ER-beta is reported to be expressed preferentially in the rat prostate, its expression in the human prostate and relationship to cancer development has not been investigated. Thus the purpose of the study was to examine mRNA levels of ER-alpha and ER-beta in benign prostatic hyperplasia and prostate carcinoma. METHODS: Samples of 15 prostate cancers obtained at radical prostatectomy were examined. All the patients had been maintained on androgen withdrawal therapy for at least 3 months. ER-alpha and ER-beta mRNAs were measured with a competitive PCR technique. RESULTS: Both ER-alpha and ER-beta mRNAs were detected in all of the prostate cancer tissues examined, as well as in PC3 and LNCap cells, although the levels varied among specimens. Interestingly, both types were significantly decreased in cases with lymph node metastasis. However, there was no correlation between ER mRNA levels and any other clinicopathological parameters. CONCLUSIONS: (1) Both ER-alpha and ER-beta mRNAs are expressed in prostate cancer and (2) expression of ER mRNA may not be related to cancer progression but may be negatively correlated with metastasis.  
CT Check Tags: Human; Male; Support, Non-U.S. Gov't  
Aged  
Aged, 80 and over  
\*Antineoplastic Agents, Hormonal: TU, therapeutic use  
\*Gene Expression Regulation, Neoplastic

**\*Leuprolide: TU, therapeutic use**

Middle Aged

**\*Prostatic Hyperplasia: GE, genetics****\*Prostatic Neoplasms: DT, drug therapy****\*Prostatic Neoplasms: GE, genetics****\*RNA, Messenger: BI, biosynthesis****\*Receptors, Estrogen: GE, genetics**

RN 53714-56-0 (Leuprolide)

CN 0 (Antineoplastic Agents, Hormonal); 0 (RNA, Messenger); 0 (Receptors, Estrogen); 0 (estrogen receptor alpha); 0 (estrogen receptor beta)

L148 ANSWER 4 OF 107 MEDLINE on STN

AN 2001029973 MEDLINE

DN PubMed ID: 10887633

TI Leuprolide implant approved for once-yearly palliative treatment of advanced prostate cancer.

AU Anonymous

SO Oncology (Williston Park, N.Y.), (2000 Jun) 14 (6) 828, 830.  
Journal code: 8712059. ISSN: 0890-9091.

CY United States

DT News Announcement

LA English

FS Priority Journals

EM 200011

ED Entered STN: 20010322

Last Updated on STN: 20010322

Entered Medline: 20001121

CT Check Tags: Human; Male

**\*Antineoplastic Agents, Hormonal: AD, administration & dosage**

Antineoplastic Agents, Hormonal: AE, adverse effects

Antineoplastic Agents, Hormonal: TU, therapeutic use

Drug Approval

Drug Implants

**\*Leuprolide: AD, administration & dosage**

Leuprolide: AE, adverse effects

**Leuprolide: TU, therapeutic use**

Palliative Care

**\*Prostatic Neoplasms: DT, drug therapy**

United States

United States Food and Drug Administration

RN 53714-56-0 (Leuprolide)

CN 0 (Antineoplastic Agents, Hormonal); 0 (Drug Implants)

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